

City of Menomonie
BOARD OF APPEALS HEARING

Thursday, March 6, 2025 - 2:00 P.M.

Menomonie City Hall
800 Wilson Avenue
Council Chambers (1st floor)

AGENDA

- I. Roll Call
- II. Request by Walmart Distribution Center for a conditional use permit for hydrogen fueling system at 6100 3M Drive – Public Hearing, Discussion and Possible Action.
- III. Board of Appeals Bylaws – Discussion (No Action).
- IV. Adjourn

Note: Upon reasonable notice, efforts will be made to accommodate the needs of individuals with disabilities. For additional information or to request the service, contact the City Clerk at 715-232-2221, Ext. 1006.



City of Menomonie
David Schofield

Director of Public Works
800 Wilson Avenue
Menomonie, WI 54751
715 232-2221 Ext.1020
dschofield@menomonie-wi.gov

February 28, 2025

Board of Appeals
City of Menomonie
800 Wilson Avenue
Menomonie, WI 54751

Re: Walmart Distribution Center
6100 3M Drive
Conditional Use Permit for Hydrogen Fueling System

Dear Board of Appeals:

Walmart Distribution Center has submitted an application for a conditional use permit for a hydrogen fueling system at 6100 3M Drive.

The subject property is zoned Restricted Industrial District (I-1). The adjacent lands to the south, west and northwest are zoned Restricted Industrial District (I-1). The adjacent lands to the northeast are zoned Local Commercial District (B-2). The adjacent lands to the east are outside of the City of Menomonie corporate limits.

Please find attached the following materials:

- Location Map
- Conditional Use Permit Application dated February 13, 2025
- Public Hearing Notice published in the Colfax Messenger and mailed to adjacent residents within 175-feet of the subject property.
- DRAFT Board of Appeals Resolution

City Code indicates that the allowable Conditional Uses in the Restricted Industrial District (I-1) include the allowable Conditional Uses in the Local Commercial District (B-2) and that a Conditional Use Permit is required for "gasoline service stations" in the Local Commercial District (B-2). It is my opinion that Walmart's proposed hydrogen fueling system is substantially similar in nature to a "gasoline service station" in terms of risk to the subject property and adjoining properties.

City Code further states "The location of these uses requires approval by the board of appeals. Such approval requires a public hearing by the board. Such approval shall be consistent with the general purpose and intent of this chapter, and shall be based upon such evidence as may be presented at

February 28, 2025

such public hearing, tending to establish the desirability or undesirability of specific proposed locations for a specific proposed use from the standpoint of the public interest, because of such factors as (without limitation because of enumeration) noise, odor, glare, vibration and increased traffic on the public streets. The board shall also give due consideration to the proposed location of entrances to and exits from uses that commonly generate a considerable volume of vehicular traffic from and to the public street in the relation of such entrances and exits to school crosswalks and pedestrian exits from public and semipublic facilities such as schools and hospitals."

The Fire Department has reviewed the proposed Hydrogen Fueling System and shared the following:

*From: Denny Klass
To: David Schofield
Date: February 17, 2025 at 7:51am
Subject: 6100 3M Dr - proposed Hydrogen fuel infrastructure*

The only item I would like to clarify is the access point into the permanent location. If we need to respond we'd like to enter off 3M Drive and into the tank storage area from the west where the current road is located.

*Dennis M. Klass, Fire Chief
Menomonie Fire Department
Business - 715 232-2414
Fax - 715 232-5100*

If the Board of Appeals concurs with the proposed use, City Staff recommends the following conditions be placed upon the approval of the Conditional Use Permit:

1. The emergency access road from the driveway from 3M Drive to the employee parking lot shall remain accessible to emergency vehicles.
2. A gate shall be provided in the northwest corner of the proposed perimeter fence around the permanent hydrogen storage pad.

The Board of Appeals may, after considering the input received during the public hearing and exercising your own judgement, add or remove conditions. City Staff cautions that these conditions should be reasonable and enforceable.

City Staff will be on hand to answer any questions that the Board of Zoning Appeals may have.

Respectfully Submitted,
CITY OF MENOMONIE

David Schofield, PE

David Schofield, PE
Director of Public Works

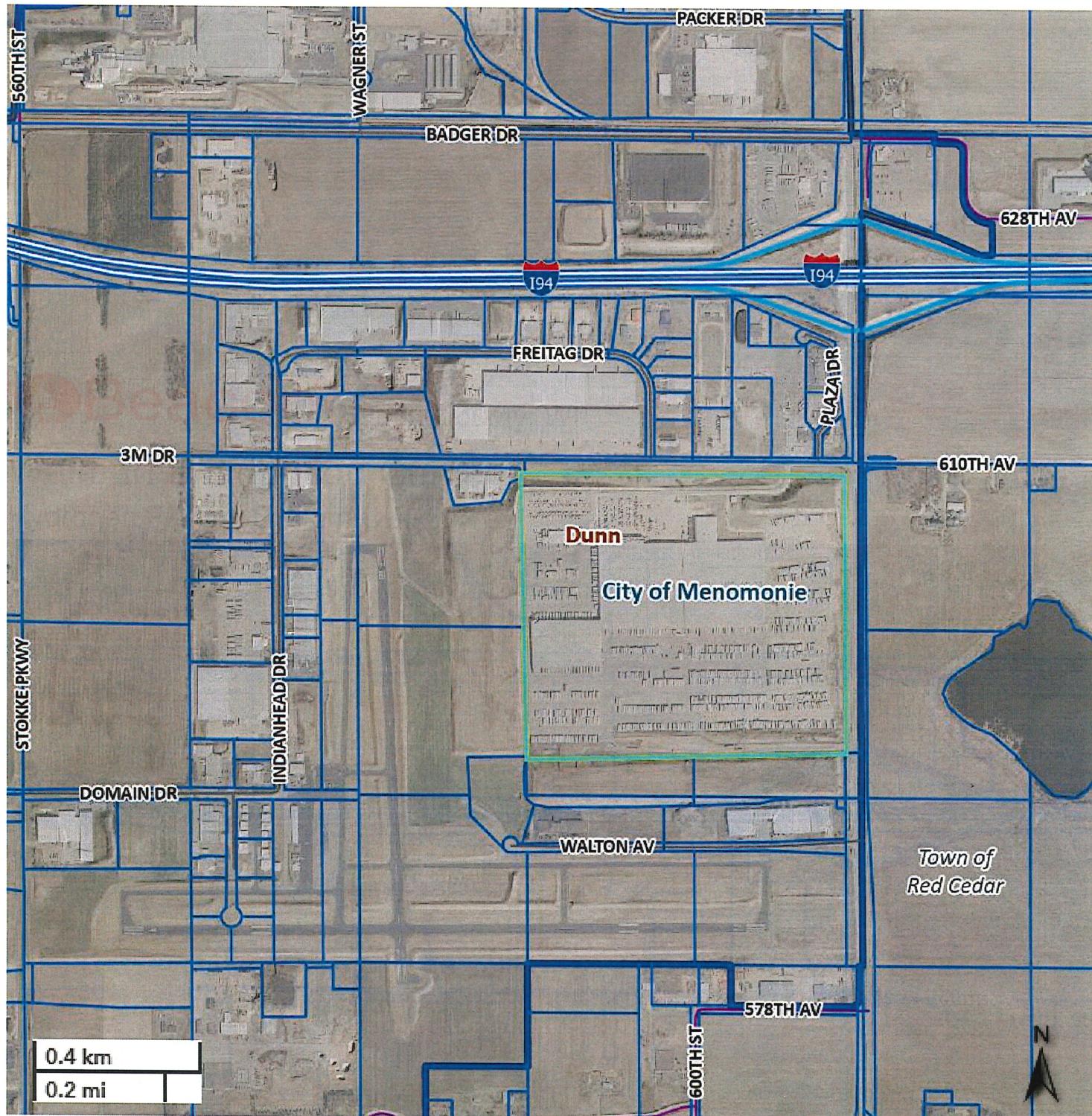


Dunn County, WI

Walmart Distribution Center

Created by: DAS

Hydrogen Fueling System CUP



This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes. This map is not guaranteed to be accurate, correct, current, or complete and conclusions drawn are the responsibility of the user.

Date created: 2/28/2025

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Developed by



BOARD OF ZONING APPEALS

Application for **CONDITIONALLY PERMITTED USE**

Appeal No. _____

Date Filed _____

Date of Notice _____

Applicant: Plug Power (represented by Jessica Marquard)

Address: 125 Vista Blvd, Slingerlands, NY 12159 Phone: (518) 918-6426

Email Address: jmarquard@plugpower.com

Property Owner: Wal-Mart

Address: Po Box 8050, Bentonville, AR 72712 Phone: 715-308-3540

Location of property: 6120 3M Dr, Menomonie, WI 54751

Legal Description: Parcel ID 1725122812201200001

Permission is requested for: Hydrogen fuel system and dispensing for Walmart's material handling equipment

I hereby certify that the above statements and plans submitted herewith are true to the best of my knowledge. The **\$250.00** has been deposited with the City Treasurer.

Date: 2/13/2025



Signature of applicant

Plot plan must be submitted with the application.

Receipt number: _____

Amount paid: _____

Special hearing = + \$50



WAL-MART MENONOMIE, WI – PROPOSED HYDROGEN INFRASTRUCTURE

February 13th, 2025

Kate Martin
City Clerk
City of Menomonie
800 Wilson Avenue
Menomonie, Wisconsin 54751

Subject: Conditional Use Permit Application for Hydrogen Storage and Dispensing System – Walmart Distribution Facility

Dear Ms. Martin,

Plug Power respectfully submits this Conditional Use Permit application for the proposed hydrogen fuel storage and dispensing system at the Walmart Distribution Facility in Menomonie, WI – located at 6120 3M Drive. Our project aims to enhance the efficiency and sustainability of Walmart's Material Handling Equipment (MHE) by replacing the existing electric battery-powered forklifts with hydrogen fuel cell-powered forklifts.

The project includes three main parts: (1) an exterior concrete pad with a liquid hydrogen tank and associated equipment and fencing, (2) underground piping to the building and roof mounted piping (mounted flush), and (3) interior fuel dispensers for forklifts. Hydrogen is an odorless, non-toxic, and non-poisonous source of clean fuel. The green hydrogen fuel installation includes non-public, fast filling interior hydrogen dispensers. This system will be for the sole use of Walmart within their facility for refilling their hydrogen fuel cell forklifts. While Walmart employees will utilize the interior fuel dispensers, the exterior hydrogen tank and equipment pad will only be accessible to Plug Power trained technicians. Once every 1-2 weeks, depending on fuel usage, a truck will come to site to refill the liquid hydrogen tank.

Below, we provide a summary of key project details and reference the relevant attachments included in this submission.

1. Project Overview

The project includes:

- Construction of an outdoor hydrogen storage tank equipment pad with a concrete foundation.
- Installation of an underground duct bank connecting the storage area to the existing building.
- Deployment of four (4) interior hydrogen gas dispensers for refueling Walmart's forklifts.
- The entire installation conforms to NFPA 2 code to ensure compliance with the highest safety and industry standards.

2. Visual Details

- Reference Attachment A: Photos of similar completed Plug Power hydrogen storage and dispensing projects.
- Reference Attachment B: Dispenser Product Description for the dispensing specifications and operations.
- Reference Attachment C: Site Plan Drawings illustrating the proposed exterior storage pad and interior dispenser locations.

3. Facility Location

- Reference Attachment C for detailed site plan drawings specifying the placement of the hydrogen storage and dispensing infrastructure.

4. End Users and Equipment

- Walmart's existing Material Handling Equipment (MHE) forklifts will be fueled by Plug Power's hydrogen fuel cell system.

5. Safety Features

- Plug Power implements rigorous safety protocols to ensure the protection of site users and the general public. Reference Attachment D: "Safety Systems Associated with Plug Power H2 Delivery Process" for full details, which include:
 - Onboard hydrogen detectors in each fuel cell.
 - Pressure relief valves, multiple pressure and temperature sensors, and thermal monitoring.
 - Fully automated system with remote monitoring.
 - Restricted access to hydrogen storage areas with daily inspections by trained Plug Power technicians.
 - Emergency shut-down devices (E-Stops) at strategic locations.
 - Leak detection and fail-safe mechanisms built into hydrogen dispensers.
 - All system designs and operations adhere strictly to NFPA 2 code for hydrogen safety.
- Reference Attachment E: Emergency Procedures for the Plug Power hydrogen infrastructure system.

6. Safety Record

- Plug Power operates over 300 sites across the United States and has not experienced any life safety incidents at these facilities.
- All sites are supported by a comprehensive Environmental, Health & Safety (EH&S) program, including 24/7 remote monitoring and on-site trained personnel.

7. Industry Safety Record

- We are not aware of any major industry-wide incidents related to facilities of this type.
- Plug Power offers training sessions for local fire departments to ensure first responders are familiar with system operations and safety measures.

8. Ownership and Operations

- Plug Power will own, operate, and maintain the hydrogen storage and dispensing system at the Walmart Distribution Facility.



Conditionally Permitted Use Application

We appreciate the City of Menomonie's consideration of this application. We look forward to working with you throughout the permitting process. Please let us know if any additional information is required.

Sincerely,

A handwritten signature in black ink, appearing to read "Jessy Marquard".

Jessy Marquard
Plug Power
Sr. Director, H2 Project Management, Engineering & Permitting
PLUG Corp. HQ, 125 Vista Blvd | Slingerlands, NY 12159
(518)918-6426
jmarquard@plugpower.com

Attachments:

- Attachment A: Photos of Similar Hydrogen Facilities
- Attachment B: Dispenser Product Description
- Attachment C: Site Plan Drawings
- Attachment D: Safety Systems Documentation
- Attachment E: Emergency Procedures

Title:

123291: Genfuel Dispenser Product Description

Introduction

The Genfuel Dispenser main function is to fuel the onboard hydrogen tank of the Gendrive fuel cell power system of the hydrogen power industrial trucks(HPITs).

The dispenser system consists of the dispenser assembly and the control panel. The dispenser assembly consists of the dispenser housing, the high pressure hydrogen module, the vent module, the user interface panel, the dewatering module and the safety devices.



Figure 1: Genfuel Dispenser

Title:

123291: Genfuel Dispenser Product Description

1. Dispenser Specification

Process Fluid: Hydrogen gas 99.9% purity

Maximum Operating Pressure: 6350 Psi

MAWP: 6600 Psi

Maximum Fueling rate: 1Kg/min

Average Fueling rate: 0.6 Kg/min

Applicable standards: NFPA2, SAE J2601-3

Impact Rating: 10000lb vehicle at 10mph

2. Dispenser Housing

The dispenser housing is made of sheet metal and is secured to the ground by mounting bolts. The housing has a dedicated lug for a grounding cable. The housing provides mounting locations for the high pressure hydrogen module, the user interface panel, the safety devices and part of the vent module. The dispenser is protected from impact damage by the bollard/railing assembly.

3. High Pressure Hydrogen Module

The dispenser high pressure hydrogen module consists of an orifice, two air operated valves, a hand valve, a nozzle, a pressure relief valve and tubing.

The orifice RFO4011 reduces the maximum flow to 1 Kg/min at the maximum pressure differential.

The air operated valve AOV5021 isolates the flow of hydrogen into the building. It opens during the fueling operation, and closes after each fueling.

The air operated valve AOV 5061 opens during fueling and closes after each fueling.

The hand valve HCV5071 function is to vent the dispenser high pressure hydrogen module during service.

The pressure transducer PT5081 function is to monitor the pressure during the fueling the process.

A second pressure transducer PT5091 monitors the pressure during the fueling process.

The pressure relief valve PSV 5051 function is to protect the high pressure hydrogen module and the Gendrive onboard hydrogen tank from excess pressure. It is set at 7000 Psi, which is 10% higher than the maximum operating pressure (MOP) of 6350 Psi.

The nozzle assembly NOZ5091 connects to the compatible receptacle of the fueling tank. The nozzle assembly includes a vent line which is used to vent the hydrogen trapped in the nozzle after each fueling. The nozzle assembly also includes a breakaway which will disconnect and safely stop the flow during fueling, if it is subjected to a force in the range of 100-500 N.

4. User Interface panel



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Author: C. Minas

Ver: 1

Title:

123291: Genfuel Dispenser Product Description

The user interface panel consists of the human control interface (HMI 5001), the start button (OS 5151), the emergency shutdown button (ESD 5141) and the electrical connector (CON 5101).

The start button (OS 5151) function is to start the fueling process.

The human control interface (HMI 5001) provides step by step instructions to the operator. It also provides feedback of the fueling process.

The emergency shutdown button (ESD5141) provides the means to shut down the fueling process in case of emergency.

The electrical connector (CON 5101) communicates with the Gendrive system master controller (SMC). It receives the signal of the temperature of the hydrogen of the Gendrive onboard tank. It also provides electrical grounding to the Gendrive fueling receptacle.

5. Safety Devices

Safety devices include a safety mat (SM5121), the hydrogen detector (GD5171), the heat sensor (HS5171) and the proximity switch (PxS 5111).

The proximity switch (PxS 5111) notifies the control panel that the nozzle has been removed from its holster.

The safety mat (SM5121) ensures that the operator is standing on it during the fueling process.

~~The hydrogen~~ detector (GD5041) monitors the hydrogen level above the dispenser housing. If it detects a hydrogen level above its allowable value, the fueling process will be shut down.

The heat sensor (HS5171) monitors the area around the dispenser for any flame. If it detects a flame, the fueling process will shut down.

The P-T board (PT5001) monitors the fueling process independently from the control panel. It uses its own pressure transducer (PT5091) and the temperature signal from the Gendrive on board tank to ensure that the fueling process follows the temperature compensated fill curve per SAE J2601-3 listed below. If it detects a negative dP/dt of high absolute value, it will shut down the air operated valves.

6. Vent module

The vent module function is to safely vent any hydrogen outdoors. . It is connected to the dispenser venting lines. It is mounted on the roof of the building and is of custom length for each dispenser installation, in order to meet the requirements of CGA G5.5-2014.

7. Control Panel

The control panel (PLC2) performs multiple functions for the operation of the dispenser.

It receives data from the safety devices, the ambient temperature sensor, the pressure transducer (PT5081) and the temperature sensor from the Gendrive on board tank. It uses this information to ensure that the fueling process follows the SAE J2601-3 requirements which include an ambient temperature range check, an initial leak check, a leak check at 80% of maximum operating pressure and a temperature compensated fill according to the following equation:

Title:

123291: Genfuel Dispenser Product Description

$P=350 \text{ bar} + (438-350)\text{bar}*(T-20C)/(65C)$

If it receives a signal from any of the safety device that a necessary condition is not met, it will interrupt the fueling process by turning off the two air operated valves.

It also turns on the dewatering pump during the refueling process.

8. Dewatering module

The dewatering module consists of the air operated water pump (P5011), a hose and a connector (CON-5171). The connector is compatible with the Gendrive dewatering adaptor. When the fueling process begins, the control panel also turns on the water pump which removes the water from the Gendrive water storage tank.

9. DFMEA

If the orifice RFO4011 fails to reduce the flow to maximum of 1Kg/min, caused by corrosion, it may cause elevated temperature of the Gendrive onboard tank. The fueling process will be shut down if this temperature exceeds 85C either by the control panel PLC2 or the P-T board PT5001.

If the air operated valve AOV5021 fails open caused by corrosion or mechanical failure, the high pressure hydrogen module between the AOV5021 and the AOV5061 will remain pressurized. The high pressure hydrogen module is designed to withstand the pressure. The amount of hydrogen between the AOVs was calculated to be 0.013 Kg or 128 standard liters which in the case of another failure may be released in the building.

If the air operated valve AOV5061 fails open caused by corrosion or mechanical failure, the high pressure module between the AOV5021 and the nozzle NOZ5091 will remain pressurized. The high pressure hydrogen module is designed to withstand the pressure.

If the hand valve HCV 5071 fails open caused by corrosion or mechanical failure, hydrogen will be vented through the vent stack during the fueling process.

If the pressure transducer PT5081 reads low caused by sensor drift, the dispenser will fill the tank to a pressure above the iso-density line. The pressure will not exceed 6350 Psi, since it is regulated upstream. Since the tank is designed for full life at the maximum pressure of 6350 Psi, there will no effect on the life of the tank.

If the pressure transducer PT5081 read high caused by sensor drift, the dispenser will fill the tank to a pressure below the iso-density line, resulting in reduced Gendrive run times.

If the E-stop button ESD5141 fails to activate caused by component or wiring failure, the operator will not be able to stop the operation at the dispenser in case of emergency. A second E-stop button is located on the dispenser control panel which can be pressed to stop the operation.

If the E-stop button ESD5141 activates prematurely caused by component or wiring failure, fueling service will be lost at the dispenser. Other dispensers can still function normally.

If the safety mat SM5121 fails to recognize the presence of the operator, fueling service will be lost at the dispenser. Other dispensers can still function normally.

 Title: 123291: Genfuel Dispenser Product Description	Doc Type:	Operation Description	Date: 9/1/2015
	Author:	C. Minas	
	Ver:	1	

If the safety mat SM5121 falsely recognizes the presence of the operator, the fueling process will not stop, when the operator steps off the mat, which can lead to drive-away. The fueling nozzle is equipped with breakaway connections to avoid or limit the damage in the case of a drive-away.

If the fill nozzle NOZ5091 fails closed caused by manufacturing defect or corrosion, fueling service will be lost at the dispenser. Other dispensers can still function normally.

If the fill nozzle NOZ5091 fails open caused by manufacturing defect or corrosion, hydrogen will leak in the dispenser area. The gas detector GD5041 will detect the presence of hydrogen shut down the dispenser.

If the start button OS5151 fails to activate caused by component or wiring failure, fueling service will be lost at the dispenser. Other dispensers can still function normally.

If the start button OS5151 activates prematurely, the dispenser and nozzle fueling line will be pressurized. These components are designed to withstand the pressure..

If the gas detector GD5041 reads low caused by sensor drift, the hydrogen level in the dispenser area may go undetected. The sensor is a certified component and is periodically calibrated.

If the gas detector GD5041 reads high caused by sensor drift, fueling service will be lost at the dispenser. Other dispensers can still function normally.

If the heat sensor HS5171 fails to detect a fire in the dispenser area caused by sensor drift, the gas detector GD5041 will detect the elevated hydrogen level before ignition and the hydrogen flow will be shut down.

If the heat sensor HS5171 activates prematurely caused by sensor drift, fueling service will be lost at the dispenser. Other dispensers can still function normally.

If the dewatering pump provides low or no flow, the Gendrive unit will not dewatered. The Gendrive unit will leak water on the floor.

If the hand valve on the air supply to dispenser HCV5030 fails closed caused by manufacturing defect or corrosion, fueling service will be lost at the dispenser. Other dispensers can still function normally.

If the air regulator PCV5040 fails and provides lower than design pressure cause by contamination, or drift, fueling service will be lost at the dispenser. Other dispensers can still function normally.

If the air regulator PCV5040 fails and provides higher than design pressure cause by contamination, or drift, the air operated valves may get damaged and fueling service will be lost at the dispenser. Other dispensers can still function normally.

10. Dispenser Hazop

The dispenser is designed to meet all the requirements of the NFPA 2 Hydrogen Technologies Code 2011 Edition. Hazards include high supply pressure, high supply temperature, leakage, fire, loss of power, external damage.

The dispenser is equipped with several safety devices which include a pressure relief valve, an orifice, a hydrogen sensor and flame sensor. An inline orifice restricts the hydrogen flow to a maximum of 1Kg/min. In the case the supply pressure



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Description**

Date: 9/1/2015

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Ver: 1

Title:

123291: Genfuel Dispenser Product Description

to the dispenser exceeds the maximum operating pressure, the pressure relief valve will activate. In the case of hydrogen leakage, the hydrogen sensor installed at the dispenser will detect the increased level of hydrogen and shut down the dispenser. In the case of external fire, the flame detector will detect the flames, and shut down the dispenser. In the case the supply gas temperature exceeds the design temperature range, the dispenser control panel will disable the fueling process. In the case of power loss, all the valves will be closed and fueling will be disabled. The dispenser is protected from external damage by the bollard/railing assembly which can withstand an impact from a 10000 lb truck at 10mph.

WAL-MART MENONOMIE, WI – PROPOSED HYDROGEN INFRASTRUCTURE

In addition to applicable local and state building and fire codes, NFPA 2 is the governing code for this type of system. This code establishes the fundamental required safeguards for the storage, piping, use, and handling of hydrogen in compressed gas (GH2) form or cryogenic liquid (LH2) form.

Safety Systems Associated with Plug Power H2 Delivery Process

The dispensers are the means inside the building by which the Hydrogen from the hydrogen skid is delivered to the Gen-drive inside the material handling equipment. Each dispenser has several means of safety features. The dispenser has an E-stop, Infra-red detectors, hydrogen detector, pressure relief valves, fail closed air-operated valves and pressure mats.

The flow of Hydrogen from the hydrogen skid to the fill hose is controlled by air-operated valves. Pressure is sent to each valve by the control solenoid in the dispenser control panel to open the valve and allow hydrogen to flow. If there is a system shutdown, E-stop as described below or loss of air pressure, the valves fail closed-preventing any further flow of hydrogen through the system.

E-stops are located on the front of each dispenser and on the front of each dispenser control panel. When the e-stop is depressed the dispenser operations is shutdown. Air supply is removed from the dispenser and roof valve is stopped and the valves automatically close via system actuation, shutting off flow of hydrogen. From the point the e-stop is activated, the dispenser goes into alarm mode and cannot be placed back into service until the Plug Power technician inspects the dispenser, deems it safe to use and resets the alarms and the e-stop.

The Infra-red sensor (Fire-eye) is mounted on the vertical utility tray above the dispenser to give a large viewing area. The sensor is activated by a spark or sustained heat source within sensing distance of the dispenser. Once the sensor is activated, which cuts offs all supply for given time-period, the detector signals the control system to shut down the dispenser. This has the same effect on the dispenser as an Estop being depressed and can alert the building management system if required.

A hydrogen leak detector is mounted directly over the dispenser on the vertical utility tray. The detector is set at 20% LEL, which is well below the NFPA required setpoint. The sensor detects any leak from the dispenser and causes the dispenser to shut down. When a H2 detection is triggered it will E-stop the dispenser and shutoff H2 supply to the dispenser.

Each dispenser has a pressure relief valve installed in the dispenser housing. Once the pressure exceeds the setpoint, the valve opens and releases pressure to the vent line to protect the dispenser piping from over protection. This will continue to

happen until the pressure in line falls below the searing pressure, at this point the valve will reseal.

Each dispenser is equipped with a pressure mat directly in front of the dispenser that fill is attended. This device senses weight on the mat and is used to guarantee that the operator is in the proper location and the fill will stop if the operator leaves the filling area. If the fill hose is removed from its holder and someone is not on the mat, a proximity switch senses the hose being removed and sounds an alarm. When this alarm is activated, the dispenser will not allow flow of hydrogen. If the operator steps off the mat during fill, the same sequence happens, and the fill will be aborted. To reset the alarm and restart the flow of product, the operator must return to the mat, hit the reset button and silence the alarm. The operator must remove the hose from Gen-drive and reattach the hose. Once the alarm is reset, the flow of hydrogen can be restarted.

There is a data line/cable on the front of each dispenser that must be connected to the fuel cell to initiate the fill sequence. The data cable allows the dispenser control system to read conditions on the fuel cell and tank prior to and during fill process. This cable also deactivates power from the cell during the fill which prevents the equipment from moving until the process is complete. The cable monitors the temperature of the tank during fill. If an alarm condition exists during fill, the process is stopped.

Another safety feature on the dispenser is password protection of the settings and reset functions. Only Plug Power personnel have the log in and passcode to allow access to the system settings and reset functions. Operators and customer management can reset certain conditions, but PP technicians are the only personnel who can reset emergency stop conditions and restart the dispenser. Additionally, the dispenser will automatically log out after 5 minutes to avoid a situation that would allow non-Plug employees access to the device settings. Once the PP tech logs in into the device, he/she only has 5 minutes before the system logs them out and they must log in again.

The dispensers have a pressure test sequence that will sense a loss of pressure condition in the tubing delivering the hydrogen. During the fill process, there are two pressure checks conducted by the system, once at the start of the fill and again at 85% of fill. If during either pressure check the system senses a leak, the system will go into emergency stop; stopping the fill and locking the dispenser until a technician can diagnose the issue/find the leak.

E-stops are located on the hydrogen skid in several locations and one is located on the building.

The E-stop on the building is placed close to the access door existing the building near the skid to allow remote shutdown of the pad without the personnel having to get close to the pad. There are e-stops located at all gates on the pad. There are also two additional e-stops, one on the skid control panel and one on the compressor control panel. When the e-stop is depressed the entire pad will shut down. Air is stopped from

all air-operated valves, which causes them to revert to fail safe position. When an e-stop is actuated, the skid goes into failure mode and cannot be placed back into service until the Plug Power technician inspects the pad ensuring a safe condition, resets the alarms, the e-stop and reactivates the hydrogen skid. Resetting the system must be performed by PP technician as the screen is locked and can only be accessed by a PP technician.

The Infra-red sensor (Fire-eye) is mounted on the vertical skid brace and aimed to area between the cryogenic pumps. The sensor is activated by a spark or sustained heat source within sensing distance of the dispenser. Once the signal is activated and maintained for give time period, the detector signals the control system to shut down the operating skid. This has the same effect on the dispenser as an Estop being depressed.

A hydrogen leak detector is mounted on the upper left corner of the skid frame. The detector is set at 25% LEL, which is well below the NFPA required setpoint. The sensor detects any leak from the skid and causes the system to shut down.

There are many pressure relief valves on the operations skid. The devices sense a pressure above their setpoint and begin to open to relief the condition. Once the pressure is below the reset value, the valve shuts. All discharge piping from the relief valves are piped to a common header and vented in the stack, approximately 20 feet above ground level. Each component has a relief valve and setpoints have been established for each component or run of piping exposed to pressure.

There is a low temperature protection device installed on the suction line of the compressor. This sensor is located immediately after the low-pressure vaporizer, which draws gas off the top of the tank. The low-pressure vaporizer raises temperature from the tank to ambient prior to entering the PDC. This prevents the possible flow of liquid into the compressor, which would damage the diaphragms. The device is set at -50F. Once activated, the alarm sends signal to control panel and shuts down the PDC.

The control panel for the operations skid requires the Plug Power technician to log into the system to acknowledge alarms, reset faults and return system to normal operations. The Plug Power technicians are the only personnel who have the log in and password to the system.

SERVICE PROCEDURE

Doc. No: PPSP-15018
Issue Date: March 23, 2015

Emergency Procedures for GenFuel Hydrogen Infrastructure

GenFuel Customer Sites

GenFuel Infrastructure & Refueling Stations



Today's Fuel Cells for proven, reliable power.



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REVISION HISTORY

Revision Number	Revision Date	Revision Description
A	03/23/2015	Original document release.



SERVICE PROCEDURE

TSB NUMBER	PPSP-15018		
TSB DESCRIPTION	Emergency Procedures for GenFuel Hydrogen Infrastructure		
DATE ISSUED	03/23/15		
CLASSIFICATION	Service Procedure		
SYSTEMS AFFECTED	MODEL NUMBER	GF1000-350X, GF2000-350, All GenDrive systems	
	SERIAL NUMBER		
MANUFACTURING CUT-IN DATE	n/a	TIME REQUIRED	n/a
PARTS LIST	PART NUMBER	DESCRIPTION	QUANTITY
TOOLS REQUIRED	•	•	
	•	•	
	•	•	
	•	•	
	•	•	
NOTES	These procedures are for use by trained and certified personnel at all GenFuel customer locations.		
SUPPORT CONTACTS	NAME	PHONE	EMAIL
	Plug Power Service	1.800.283.1922	Technical_Support@PlugPower.com
AUTHOR OF TSB	J. Brown / D. Skidmore / C. Minas / T.Terrill / R. Vang		

GENFUEL EMERGENCY PROCEDURES

DANGER



EXPLOSION AND BURN HAZARDS

- Hydrogen gas is invisible, odorless, and tasteless.
- Hydrogen gas is flammable and burns easily and invisibly.
- The flammable mixture of hydrogen and air can be explosive.
- Do not smoke near or on the hydrogen pad, the hydrogen supply piping, a refueling station or a GenDrive system.
- Do not use gas-powered tools or equipment (snow throwers or lawn mowers) on the hydrogen pad.



PRESSURIZED GAS HAZARDS

- The storage tanks of the GenFuel hydrogen infrastructure hold liquid and compressed hydrogen at a pressure of 7500psi or less.
- Do not try to adapt or do servicing on a hydrogen infrastructure component until you can isolate the high-pressure hydrogen and make the component safe for servicing.
- Do not try to release, defuel, or remove hydrogen directly from a hydrogen tank. Use the correct venting procedures.
- Do not loosen or tighten a fitting if you are not sure if it has pressurized gas. Incorrectly connected piping can cause a sudden release of pressurized hydrogen.
- **Never use water to extinguish a cryogenic hydrogen fire.** Water can cause valves to freeze in an unsafe position and can cause increased pressurization.



SAFETY HAZARDS

- You can easily hit your head on the pipes, struts, and other equipment of the hydrogen pad. Be careful and always wear protective headgear and other PPE.
- Make sure there are no hoses, equipment, or other obstacles on the ground where you need to walk.
- During the winter season, be careful when you walk around the hydrogen pad. Ice and snow can collect around the equipment and piping and you can cause injury to yourself or damage to the equipment.

LOW-TEMPERATURE HAZARDS



- The storage tanks of the GenFuel hydrogen infrastructure hold liquid hydrogen at cryogenic temperatures as low as 423°F (-253°C).
- Cryogenic liquids and gas can cause cryogenic burns. Wear the correct PPE.
- Liquid air can bond to cryogenic hydrogen piping. Be sure to warm the ice and remove it before you do any servicing on the piping or connections.

EMERGENCY PROCEDURES - HYDROGEN PAD

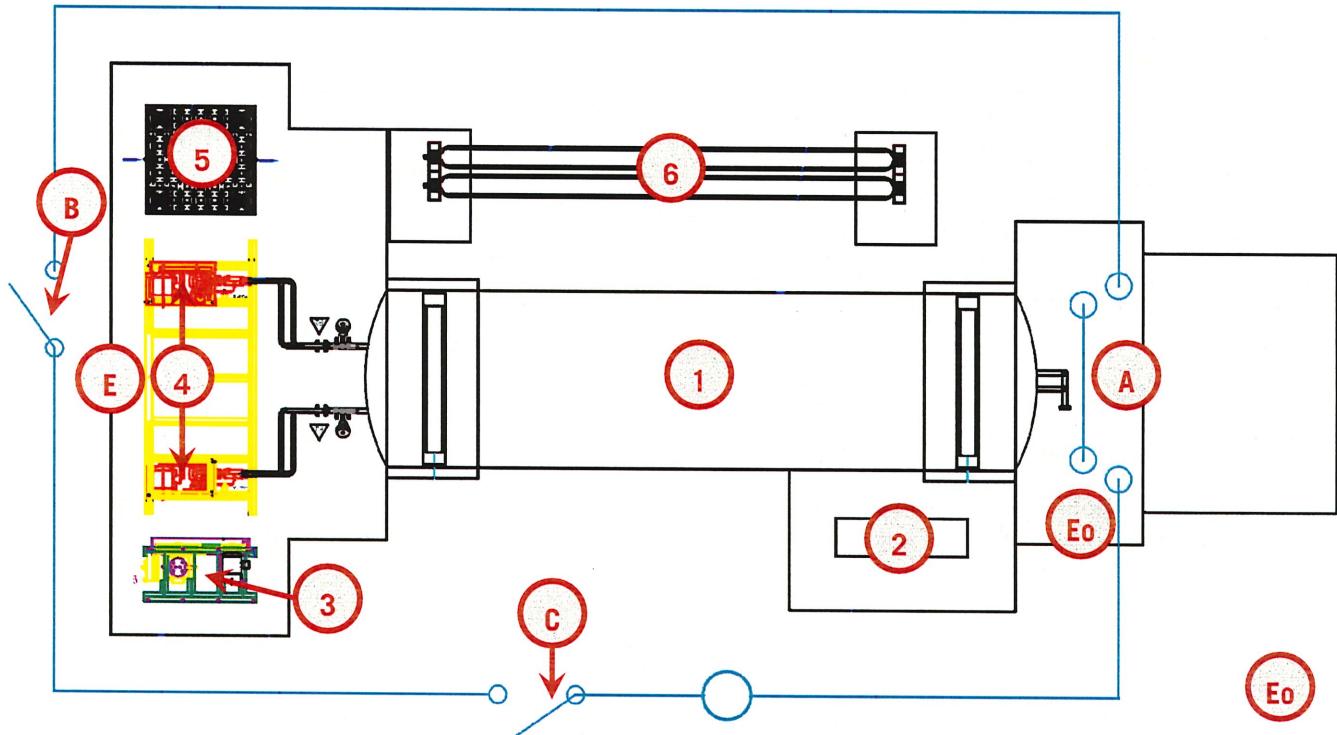
It is important for the Service Technician to understand these emergency procedures. Since the customer does not know the hydrogen infrastructure, the Service Technician must:

- know the usual system operations and be able to identify dangerous or emergency conditions
- know what to do for dangerous or emergency conditions
- know what to do for each different type of emergency and who to tell
- know how to get access to the hydrogen pad.

SAFETY SYSTEMS - HYDROGEN PAD

The GenFuel hydrogen equipment is installed within a fenced area of the hydrogen pad. The GenFuel system has components that make sure the hydrogen equipment operates safely.

- Hydrogen detectors and flame detectors monitor for leaks and flames and can automatically stop the system.
- Pressure relief devices and vent stacks prevent too much pressurization in the tanks and piping.
- Emergency Stop buttons let trained and certified personnel manually stop the GenFuel equipment. One is located on the control panel and the second can be located inside the delivery gate or on a customer building near the hydrogen pad.
- Fire extinguishers and other safety equipment are available for any emergency.



GenFuel Hydrogen Pad: (A) Delivery Gate; (B) Access Gate 1; (C) Access Gate 2; (1) Liquid Hydrogen Storage Tank; (2) Low-pressure Vaporizer; (3) Gas Compressor; (4) Hydrogen Pumps; (5) High-pressure Vaporizer; (6) High-pressure Hydrogen Gas Storage Tubes. (E) Locations of the Emergency Stop buttons (Eo is optional location).

ACCESS TO THE HYDROGEN PAD

DANGER

DO NOT GO NEAR THE HYDROGEN PAD IF THERE ARE ANY FIRE, ELECTRICAL OR EXPLOSION HAZARDS!

If you find unusual conditions or malfunctions such as fluid leaks or hissing sounds, immediately isolate the equipment with the malfunction. Examine the complete system for hazardous conditions before you try any repairs. The GenFuel system has safety components that monitor for unusual conditions or malfunctions and will automatically stop the system. Usually it is not necessary to manually stop the system.

Only trained and certified personnel approved by Plug Power can go into the fenced area of the hydrogen pad. This includes the designated Emergency Response Team and employees of:

- Plug Power Inc.
- the site customer
- a third-party industrial gas supplier.

Any trained and certified personnel approved by Plug Power who goes into the fenced area of the hydrogen pad must read these Emergency Procedures.

Any trained and certified personnel approved by Plug Power who goes into the fenced area of the hydrogen pad must wear the correct personal protective equipment (PPE).

- A construction helmet or hard hat.
- Safety glasses. Some service procedures require personnel to wear a face shield.
- Nomex or other flame resistant coveralls or clothing.
- Gloves (leather or Nomex if possible).
- Closed-toe leather shoes.

On the hydrogen pad there is one delivery gate and two access gates.

- Personnel must unlock at least two of the three gates to make sure they can get out of the fenced area during an emergency. They must put an orange cone in front of the open gate to make sure people know the gates are open.
- Any time Plug Power personnel are away from the hydrogen pad, they must lock the delivery gate and the two access gates to prevent access by unapproved personnel.
- The Plug Power service technicians, Emergency Response Team, and other personnel approved by Plug Power must know where the keys are located and what they unlock. The security personnel or the asset protection department of the customer site usually keeps the keys to the locks of the hydrogen pad. Each GenFuel site can be different. For example, the customer site might keep keys at two locations:

Gate Locks

Truck gate
(to the service road to get delivery access).
Hydrogen Pad
(for delivery and service access)

Location of Keys

Guard gate for trucks
(near the entrance to the campus).
Asset Protection (AP) or Security desk

VENT STACK OPERATIONS

When the hydrogen system operates correctly, untrained personnel can think that normal venting processes are a malfunction or a danger. They are not; these are the usual operating conditions.

To reduce pressure, the hydrogen system releases hydrogen gas into the air through vent stacks.

- This is not a safety hazard or a problem with the equipment. The pressure relief devices are connected to the vent stack so that the hydrogen components can release pressure safely.
- It is not necessary to push the Emergency Stop button during the venting process.
- It is not necessary to tell the Emergency Response Team or to get emergency equipment.
- Stay away from the vent stack during venting and wear the correct PPE. Liquid air can fall and cause cryogenics burns.

Static electricity can cause the ignition of hydrogen gas at the top of a vent stack.

- The flame is not visible during the day, but is visible at night. The flame usually burns hot and quickly.
- This is not a safety hazard or a problem with the equipment.
- The vent stacks are grounded to reduce this occurrence.
- It is not necessary to tell the Emergency Response Team or to get emergency equipment.
- If the flame becomes a hazard or goes to other components, use one of the Emergency Stop buttons for the hydrogen pad to stop the operation of the hydrogen equipment. If a pressure relief device caused the venting, hydrogen can continue to release until the pressure decreases to a safe level.



Hydrogen Vapor from Vent Stack



Vent Stack Flame at Night

EMERGENCY CONDITIONS ON THE HYDROGEN PAD

If a trained and certified Plug Power Service Technician sees emergency conditions on the hydrogen pad, they must use the emergency procedure below and tell Plug Power management.

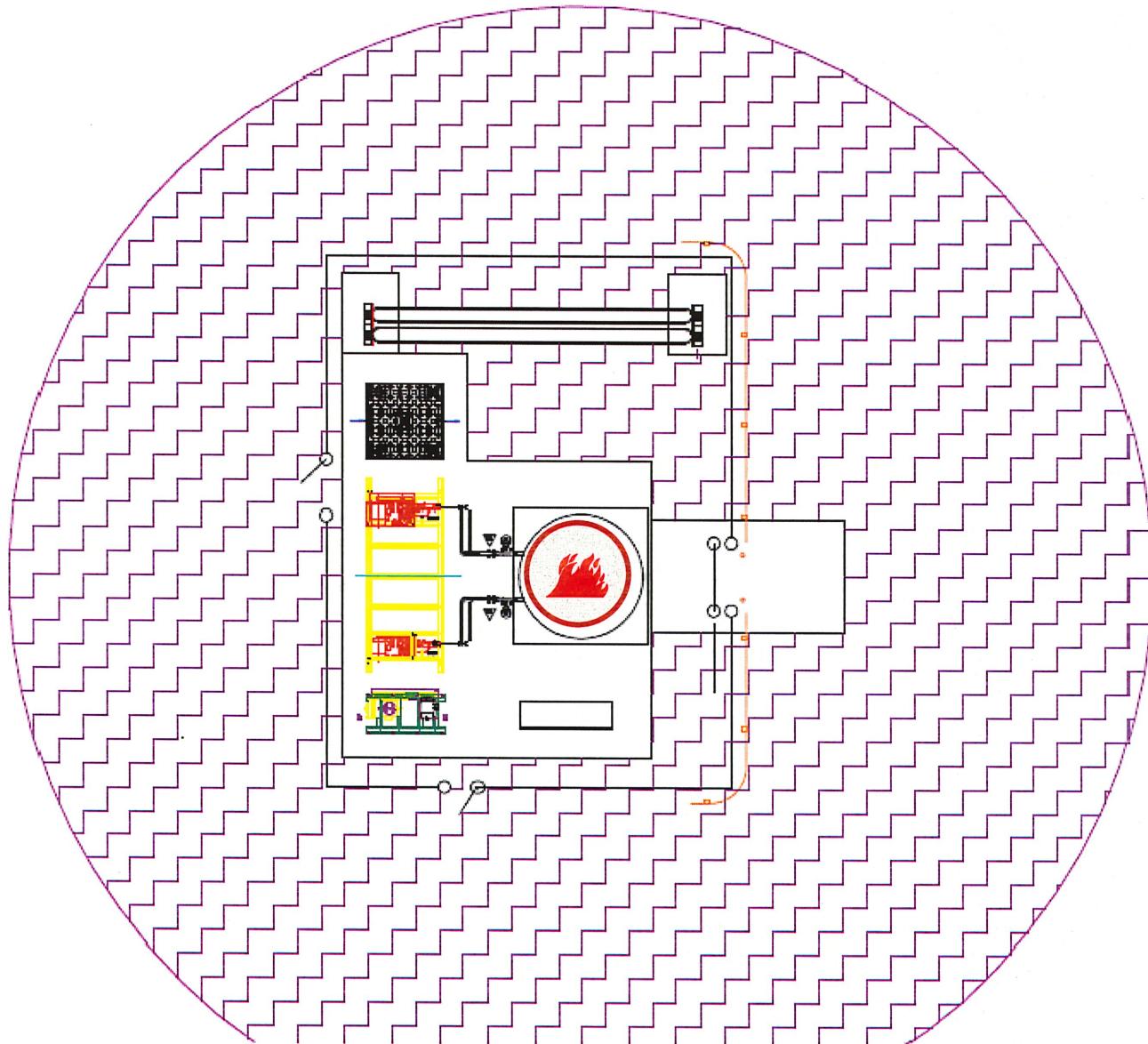
If a trained site customer sees emergency conditions on the hydrogen pad, they must use their site-specific emergency notification list. If there is no approved notification list for the site, customers must use the list below to tell Plug Power personnel about emergency conditions.

1. Site Service Technician
2. Regional Service Representative
3. Service Manager
4. Director of Field Service.

If necessary, a trained and certified person approved by Plug Power can also use the procedure below to manually stop the GenFuel system before they tell Plug Power personnel.

If there are visible flames on the hydrogen pad (not from the vent stack), do this Emergency Procedure.

1. Use an Emergency Stop button to stop the flow of hydrogen and the operation of the equipment.
 - a. If it is safe and possible to do so, go to the Emergency Stop button located on the customer building outside the hydrogen pad. Push the Emergency Stop button.
 - b. If there is no Emergency Stop button outside the hydrogen pad, try to operate the Emergency Stop button located near the delivery gate of the hydrogen pad. Make sure you can safely get to the button. Push the Emergency Stop button.
 - c. If you cannot operate the Emergency Stop button near the delivery gate, try to operate the Emergency Stop button on the control panel. Make sure you can safely get to the control panel. Push the Emergency Stop button.
 - d. **Note:** If there was a release of hydrogen, wait for the hydrogen to mix with the ambient air before you go near the hydrogen equipment. (Standard time is 5 minutes after the hydrogen release stops.)
2. Tell the Emergency Response Team.
3. Quickly make a safety zone a minimum of 75ft (23m) in every direction around the hydrogen pad.
4. Remove all personnel from the safety zone. Only approved personnel can be inside the safety zone. Be sure to remove them to a location that is upwind from the hydrogen pad. If possible, look for a vapor cloud to identify the best location.
5. From outside the hydrogen pad, do a visual inspection of the equipment to make sure you can safely enter the fenced area.
6. If it is safe and possible to do so, unlock the two access gates and the delivery gate of the hydrogen pad. Unlock at least two of the three gates.
7. Let the fire burn out.
 - a. Make sure the Emergency Response Team and the Fire Department (if necessary) know that there is cryogenic hydrogen.
 - b. **Never use water to extinguish a fire on the hydrogen pad.** Water can cause valves to freeze in an unsafe position and can cause increased pressurization.
8. When the Emergency Response Team finds the conditions to be safe, only approved personnel can go into or near the hydrogen pad.
9. Give the information about the emergency and the results of the damage inspection to Plug Power management.



Make a 75 ft Safety Zone for Hydrogen Pad Emergencies (not to scale).



Tell the Emergency Response Team.



Do not use water to put out a fire on the hydrogen pad.

EMERGENCY PROCEDURES – REFUELING STATION

If a trained and certified Plug Power Service Technician sees emergency conditions at the refueling station, they must use the emergency procedure below and tell Plug Power management.

If a trained site customer sees emergency conditions at the refueling station, they must use their site-specific emergency notification list. If there is no approved notification list for the site, customers must use the list below to tell Plug Power personnel about emergency conditions.

1. Site Service Technician
2. Regional Service Representative
3. Service Manager
4. Director of Field Service.

If necessary, a trained and certified person approved by Plug Power can also use the procedure below to manually stop the GenFuel system before they tell Plug Power personnel.

DANGER

DO NOT GO NEAR THE CONTROL PANEL OR A FUEL DISPENSER IF THERE ARE ANY FIRE, ELECTRICAL OR EXPLOSION HAZARDS!

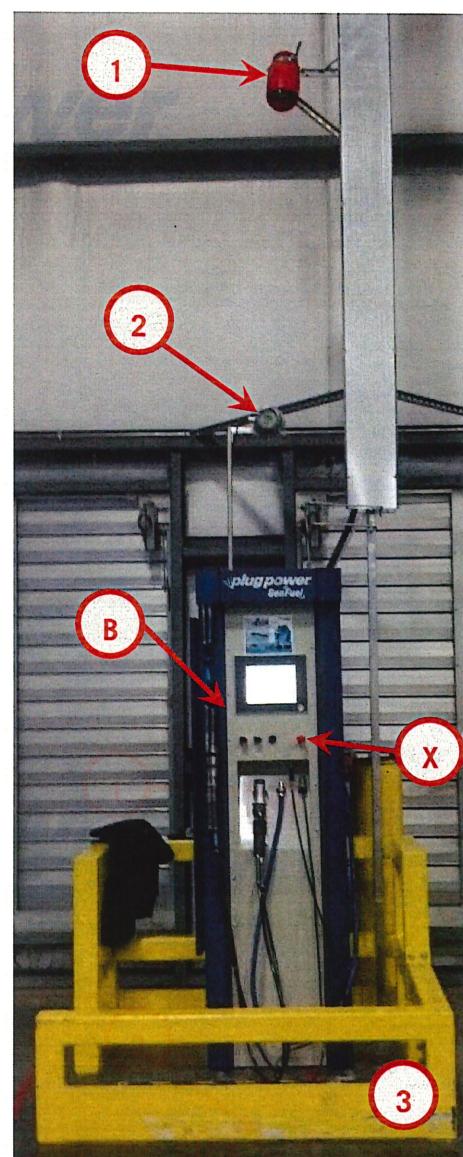
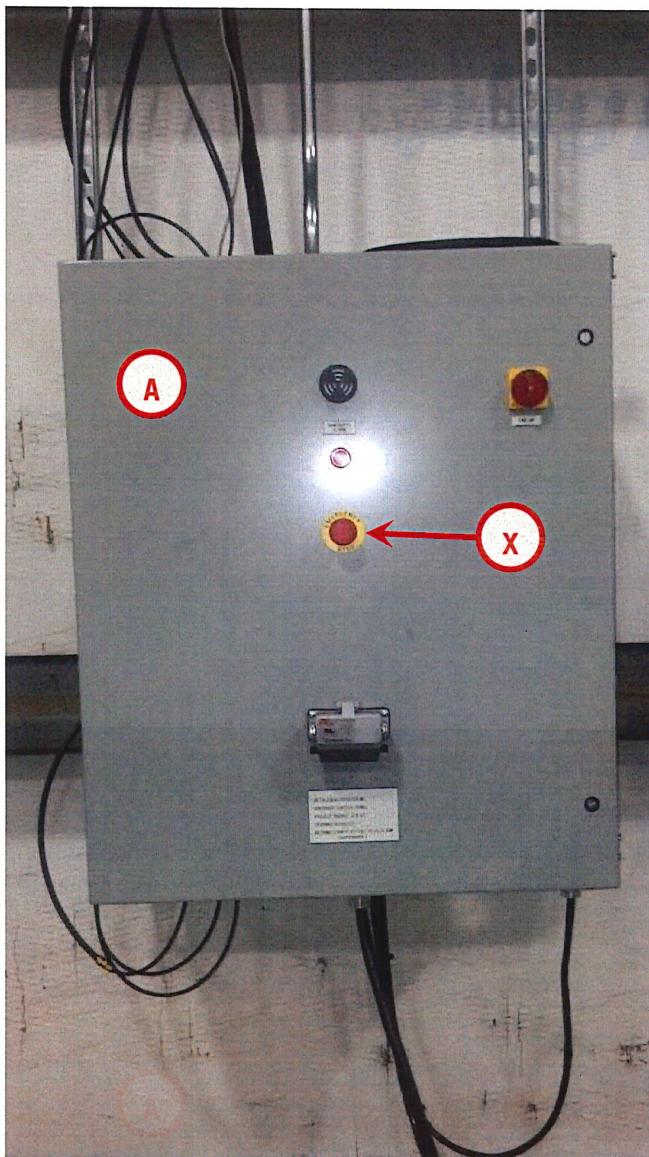
If you find unusual conditions or malfunctions such as fluid leaks, hissing sounds or venting noises, immediately isolate the equipment with the malfunction. Examine the complete system for hazardous conditions before you try any repairs. The GenFuel system has safety sensors that monitor for unusual conditions or malfunctions and will automatically stop the system. Usually it is not necessary to manually stop the system.

If there is an alarm at the refueling station, identify the cause and use the correct procedure below.

1. Do not immediately go near the fuel dispenser. Do a visual inspection of the equipment and look for a visible flame.
2. If a flame is visible and there is a fire at or near the control panel:
 - a. The control panel contains 110VAC and electrical fires can occur.
 - b. If you can do it safely, push the Emergency Stop button on the control panel or fuel dispenser to stop the flow of hydrogen to the fuel dispenser.
 - c. Use foam or another NFPA-approved material to extinguish the fire. If necessary, let the fire burn out.
 - d. Tell the Emergency Response Team.
3. If a flame is visible and there is a fire at or near the fuel dispenser:
 - a. Tell the Emergency Response Team.
 - b. Quickly make a safety zone a minimum of 50ft (15m) in every direction around the fuel dispenser.
 - c. Remove all personnel from the safety zone. Only approved personnel can be inside the safety zone.
 - d. From outside the safety zone, do a visual inspection of the equipment to make sure you can safely go to the control panel or the fuel dispenser.
 - e. If you can do it safely, push the Emergency Stop button on the control panel or fuel dispenser to stop the flow of hydrogen to the fuel dispenser.
 - f. Use foam or water to extinguish the fire. If necessary, let the fire burn out.
 - g. When the Emergency Response Team finds the conditions to be safe, only approved personnel can go near the refueling station.
 - h. Give the information about the emergency and the results of the damage inspection to Plug Power management.
4. If you do not see a flame, look at the hydrogen detector assembly and the flame detector assembly.
 - a. If you can see the red or yellow lights on the flame detector, it has caused the alarm.
 - i. The flame detector assembly automatically stops the flow of hydrogen to the fuel dispenser.

- ii. Push the Emergency Stop button on the control panel.
- iii. Do an assessment of the equipment and conditions and make sure it is safe to go near the fuel dispenser.
- iv. Use the HMI display to stop the alarm, isolate the fault, and do the servicing.
- v. If the conditions are dangerous, get the Emergency Response Team.
- b. If you cannot see the red or yellow lights on the flame detector, the hydrogen detector has caused the alarm.
 - i. The hydrogen detector automatically stops the flow of hydrogen to the fuel dispenser:
 - ii. Do a visual inspection of the equipment to make sure you can safely go near the fuel dispenser.
 - iii. Do an assessment of the equipment and conditions and look for signs of a hydrogen leak.
 - iv. Use the HMI display to stop the alarm, isolate the leak, and do the servicing.
 - v. If the conditions are dangerous, get the Emergency Response Team.

5. **If there was a recent loss of electrical power**, you must reset the safety circuit alarm. You must do this at each refueling station.



GenFuel Refueling Station: (A) Control Panel; (B) Fuel Dispenser; (1) Flame Detector; (2) Hydrogen Detector; (3) Bollards. (X) Locations of the Emergency Stop buttons.

POWER AHEAD



plugpower

968 Albany Shaker Road
Latham, New York 12110

TEL: 518.782.7700

www.plugpower.com

HYDROGEN INFRASTRUCTURE SYSTEM

FOR ZONING BOARD APPROVAL
FEBRUARY 14, 2025

PLUG GENFUEL HL-550D SYSTEM
WALMART DISTRIBUTION CENTER
6120 3M DRIVE
MENOMONIE, WISCONSIN, USA



HYDROGEN SYSTEM

PLUG POWER
125 VISTA BLVD
SLINGERLANDS, NEW YORK 12059
WWW.PLUGPOWER.COM



CUSTOMER

WALMART DISTRIBUTION CENTER
6120 3M DRIVE
MENOMONIE, WISCONSIN, USA
WWW.WALMART.COM

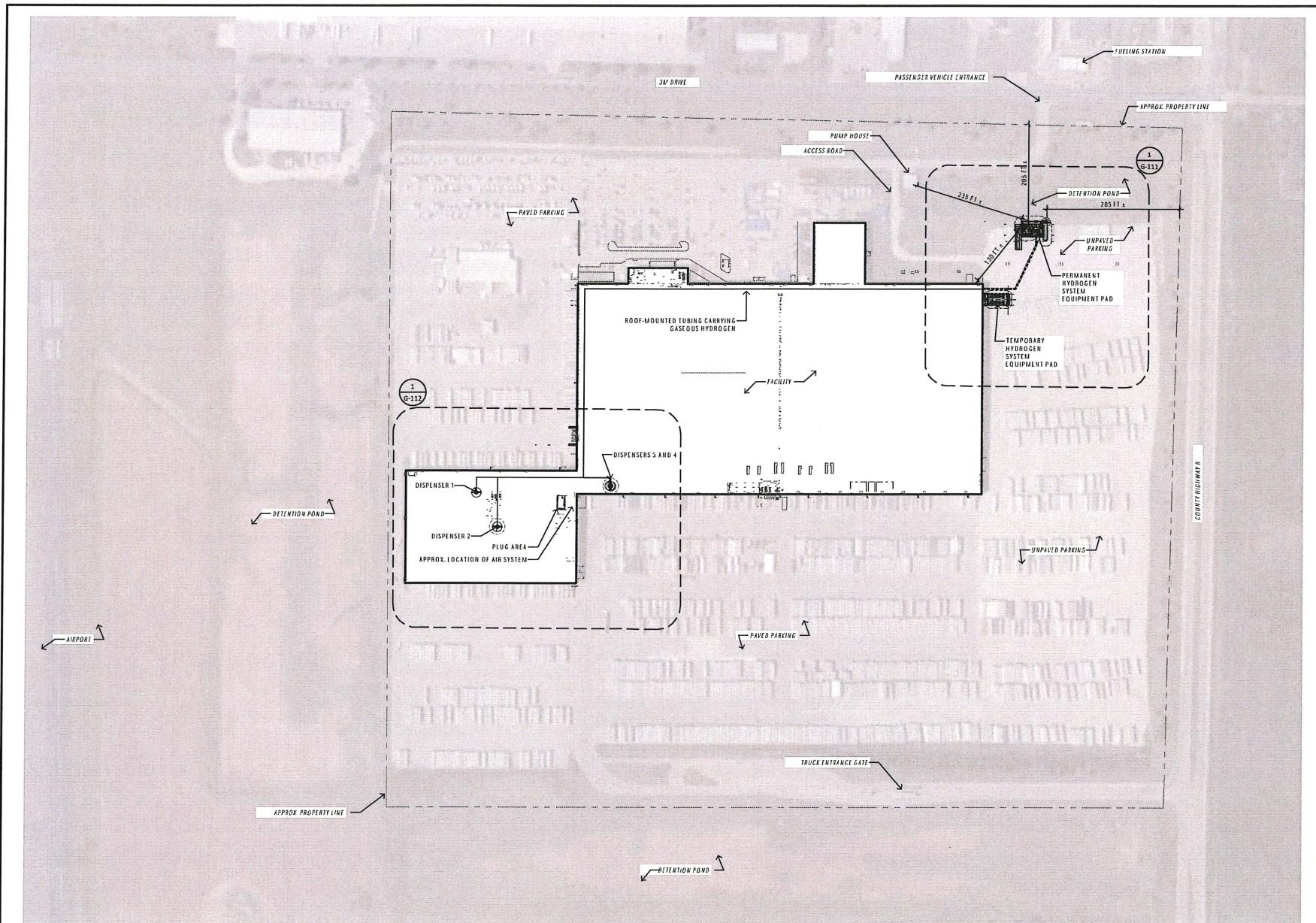
TABLE OF CONTENTS		ZONING APPROVAL FEB 14, 2023
NUMBER	NAME	
G-600	COVER SHEET	A
G-101	HYDROGEN SYSTEM LAYOUT PLAN	A
G-111	HYDROGEN SYSTEM LAYOUT PLAN NEAR HYDROGEN PAD	A
G-112	HYDROGEN SYSTEM LAYOUT PLAN NEAR DISPENSERS	A
G-121	HYDROGEN SYSTEM PAD LAYOUT PLAN AT TEMPORARY SYSTEM	A
G-131	HYDROGEN SYSTEM PAD LAYOUT PLAN	A
G-151	HYDROGEN SYSTEM - VEHICLE MOVEMENTS - PERM. PAD	A
G-152	HYDROGEN SYSTEM - VEHICLE MOVEMENTS - TEMP. PAD	A
G-510	HYDROGEN SYSTEM - TYPICAL DETAILS - NEAR DISPENSER	A
G-511	HYDROGEN SYSTEM - TYPICAL DETAILS	A
G-901	HYDROGEN EXTERIOR PAD - SAFETY SYSTEMS EXHIBIT	A

ISSUED FOR ZONING BOARD APPROVAL																															
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Checked By:</td> <td style="width: 90%;">JVM</td> </tr> <tr> <td>Drawn By:</td> <td>MJB</td> </tr> <tr> <td colspan="2">Hydrogen Producer:</td> </tr> <tr> <td colspan="2" style="text-align: center;">  125 Vista Boulevard Slingerlands, New York, USA www.plugpower.com </td> </tr> <tr> <td colspan="2"> Project GenFuel </td> </tr> <tr> <td colspan="2"> Hydrogen Storage and Distribution Infrastructure </td> </tr> <tr> <td colspan="2"> HL-5500 System </td> </tr> <tr> <td colspan="2"> Location: Walmart Distribution Center </td> </tr> <tr> <td colspan="2"> 6120 3M Drive Menomonie, WI 54751 </td> </tr> <tr> <td colspan="2"> Drawing Name: Cover Sheet </td> </tr> <tr> <td colspan="2"> Project No: 2501 </td> </tr> <tr> <td colspan="2"> Scale: AS SHOWN </td> </tr> <tr> <td colspan="2"> Date: February 14, 2025 </td> </tr> <tr> <td colspan="2"> Revision: A </td> </tr> <tr> <td colspan="2"> Drawing Number: G-000 </td> </tr> </table>		Checked By:	JVM	Drawn By:	MJB	Hydrogen Producer:		 125 Vista Boulevard Slingerlands, New York, USA www.plugpower.com		Project GenFuel		Hydrogen Storage and Distribution Infrastructure		HL-5500 System		Location: Walmart Distribution Center		6120 3M Drive Menomonie, WI 54751		Drawing Name: Cover Sheet		Project No: 2501		Scale: AS SHOWN		Date: February 14, 2025		Revision: A		Drawing Number: G-000	
Checked By:	JVM																														
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Scale: AS SHOWN																															
Date: February 14, 2025																															
Revision: A																															
Drawing Number: G-000																															



KEY SITE LOCATION PLAN
SCALE: APPROX. 1" = 2000'





APPROVAL

Checked By: JVM
Drawn By: MJB
Hydrogen Provider:

Plug

125 Vista Boulevard
Slingerlands, New York, USA
www.plugpower.com

Project

GenFue

Hydrogen Storage and Distribution Infrastructure

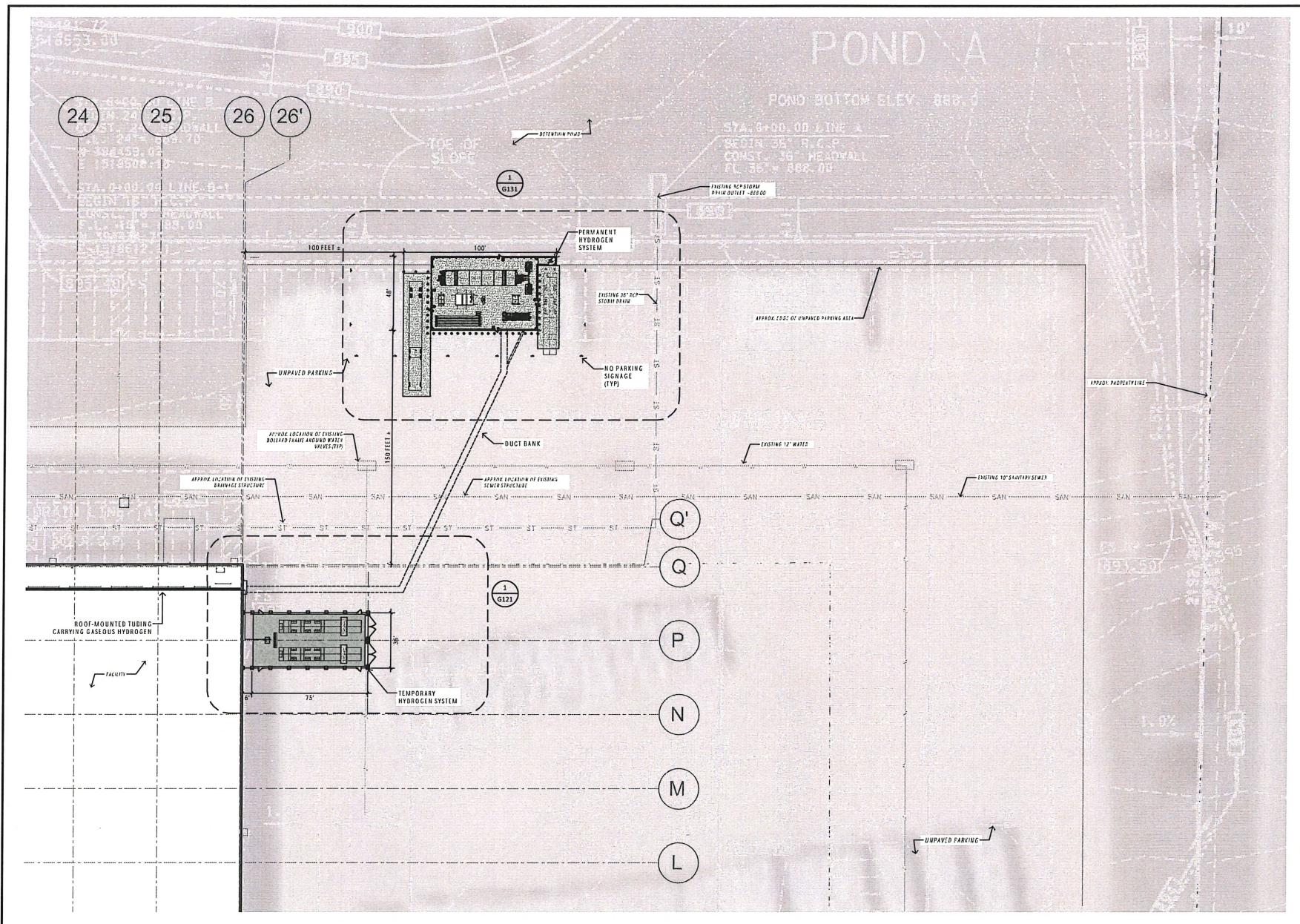
Location: Walmart

Walmart
Distribution Center
6120 3M Drive
Menomonie, WI 54751

Drawing Name:

Project No.	2501
Scale:	AS SHOWN
Date:	February 14, 2025
Revisions:	A
Drawing Number:	

G-101

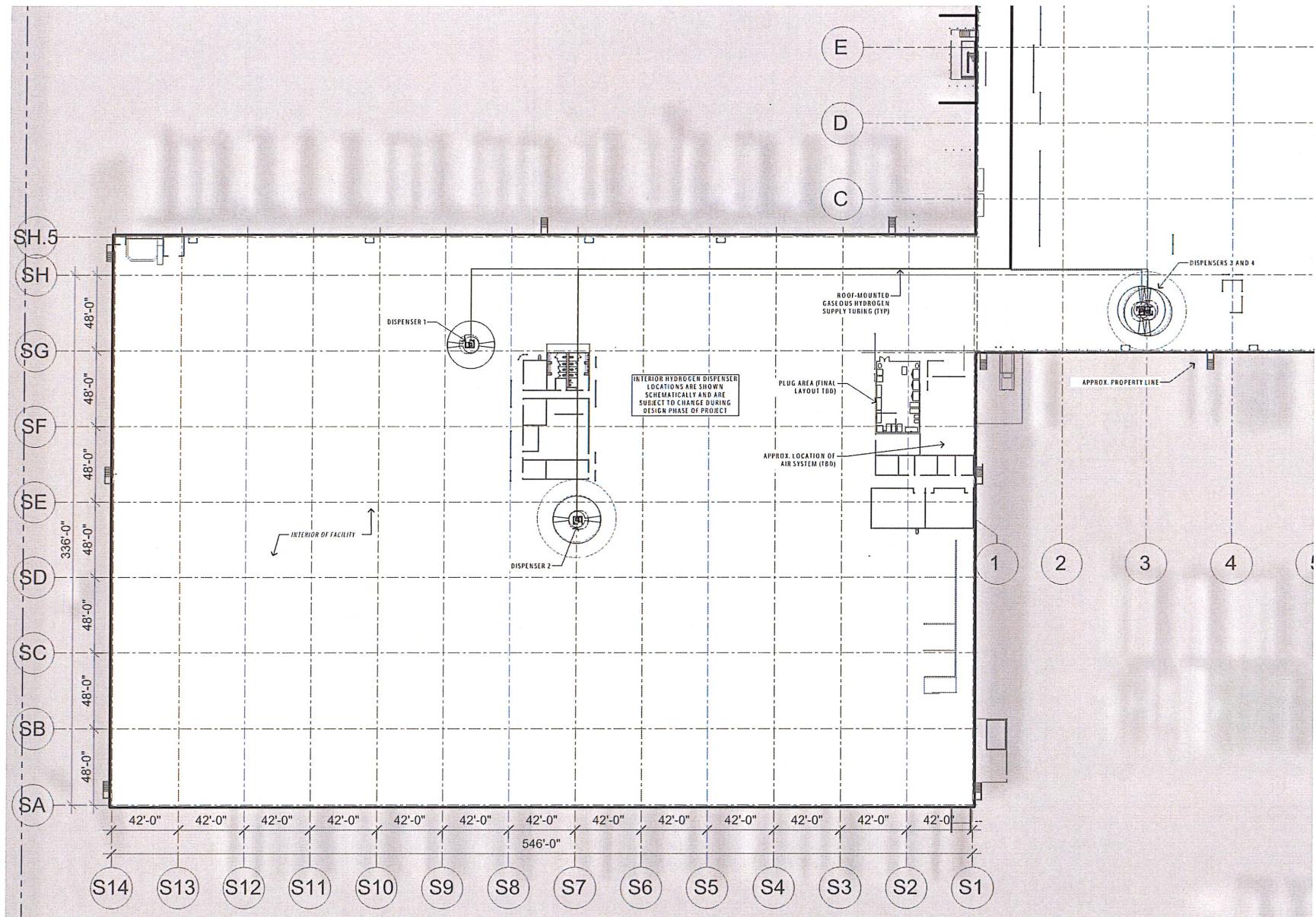


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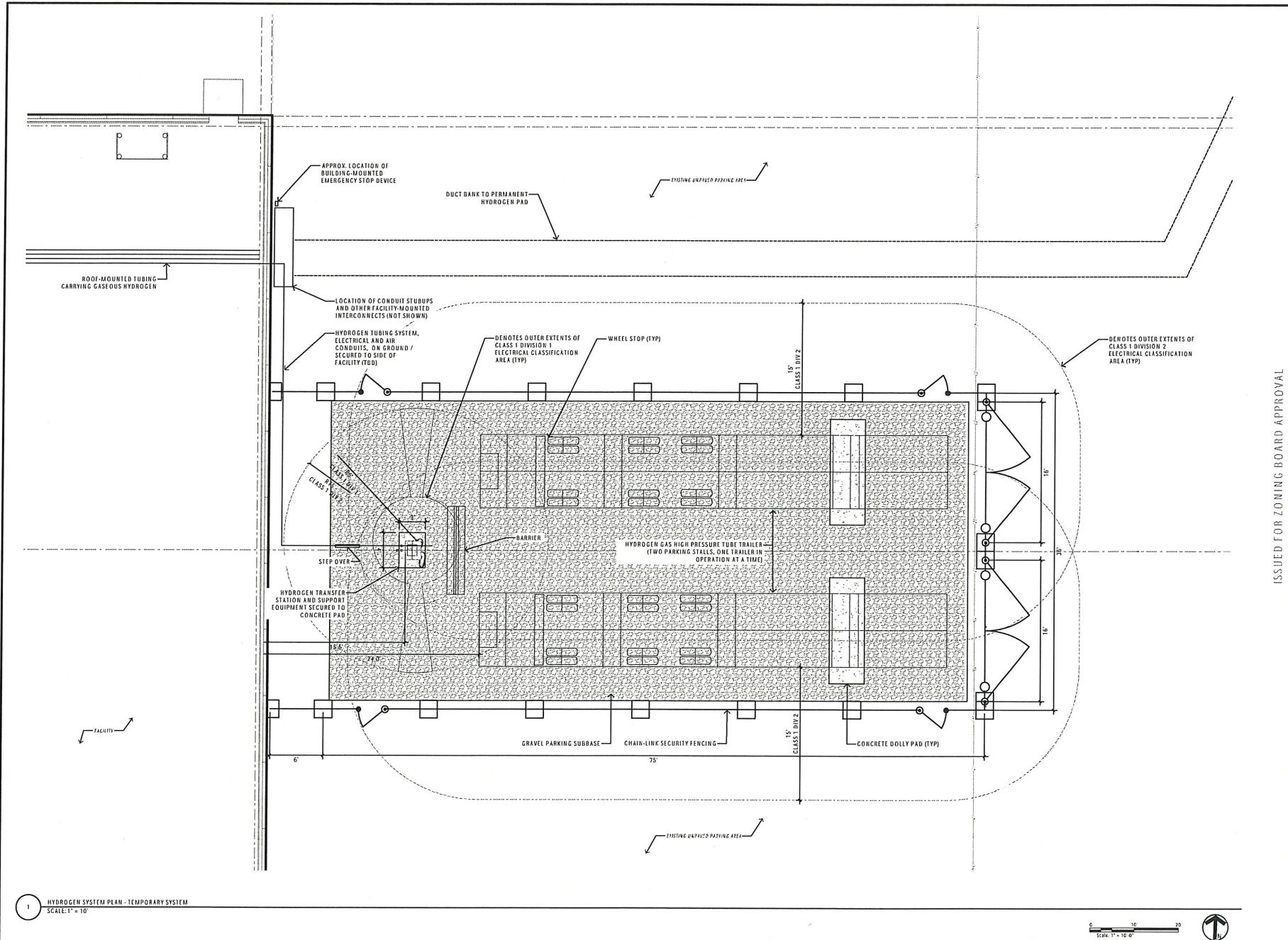


1 SITE PLAN - DISPENSER AREA
SCALE: 1" = 30'

0 30°

1

G-112



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APPROVAL

FOR ZONING BOARD OF APPEALS

Checked by:	JVM
Drawn by:	MJB
Hydrogen Provider:	
PLUG	
125 Vista Boulevard	
Slingerlands, New York, USA	
www.plugpower.com	

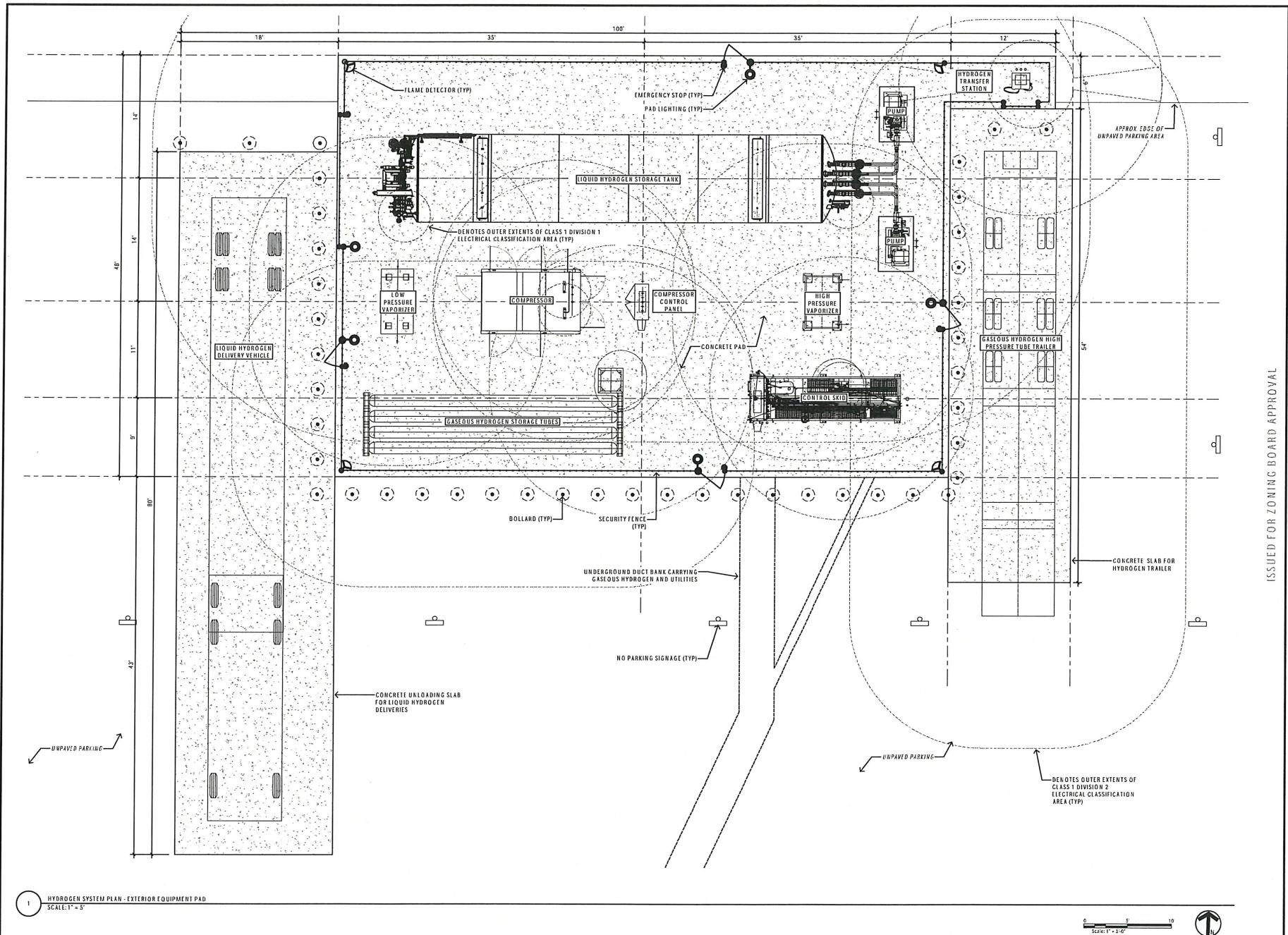
ISSUED
Project
GenFuel
Hydrogen Storage and
Distribution Infrastructure
HL-550D System

Location: Walmart
Distribution Center
6120 3M Drive
Menomonie, WI 54751

Drawing Name:
**Hydrogen System
Pad Layout Plan
Temporary System**

Project No.	2501
Scale	AS SHOWN
Date:	February 14, 2025
Revision:	A
Drawing Number:	

G-121



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Plug
125 Vista Boulevard
Englewood, New York, USA
www.pluginpower.com

125 Vista Boulevard
Slingerlands, New York, USA
www.pinepower.com

Location: **Walmart
Distribution Center**
6120 3M Drive
Menomonie, WI 54751

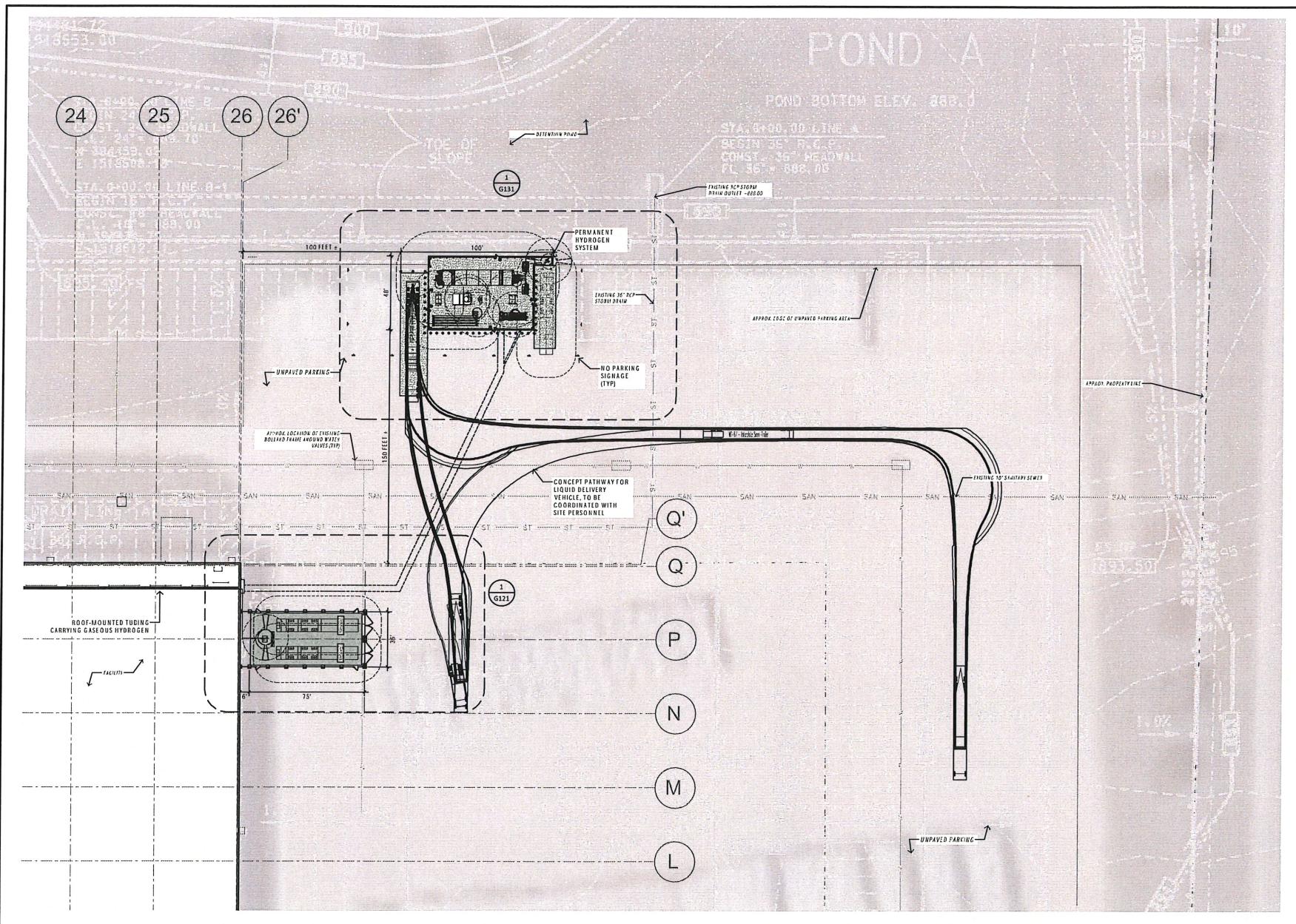
Drawing Name: **Hydrogen System Pad Layout Plan**

Project No.	2501
Scale:	AS SHOWN
Date:	February 14, 2025
Revision:	A
Drawing Number:	

G-131

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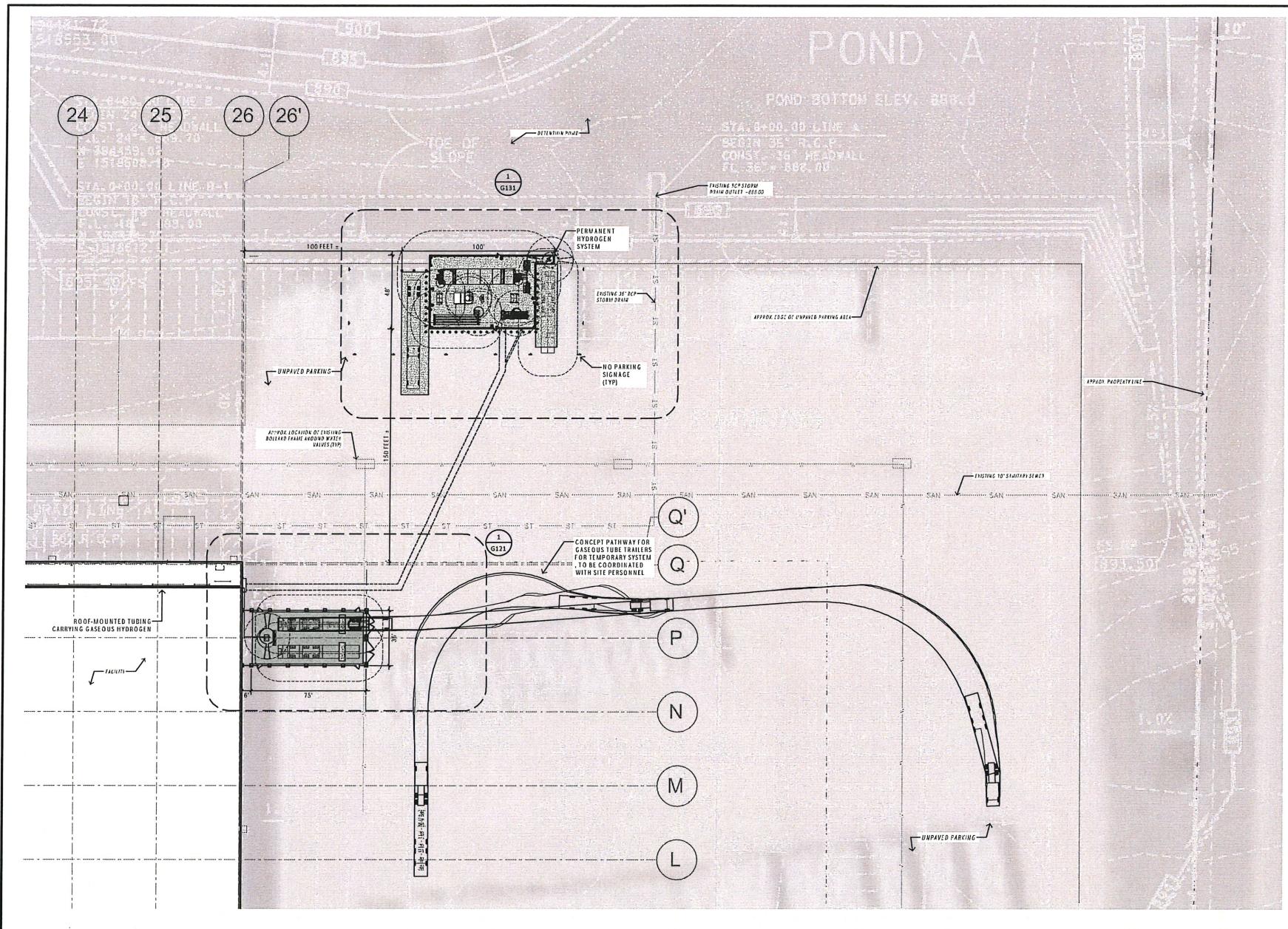


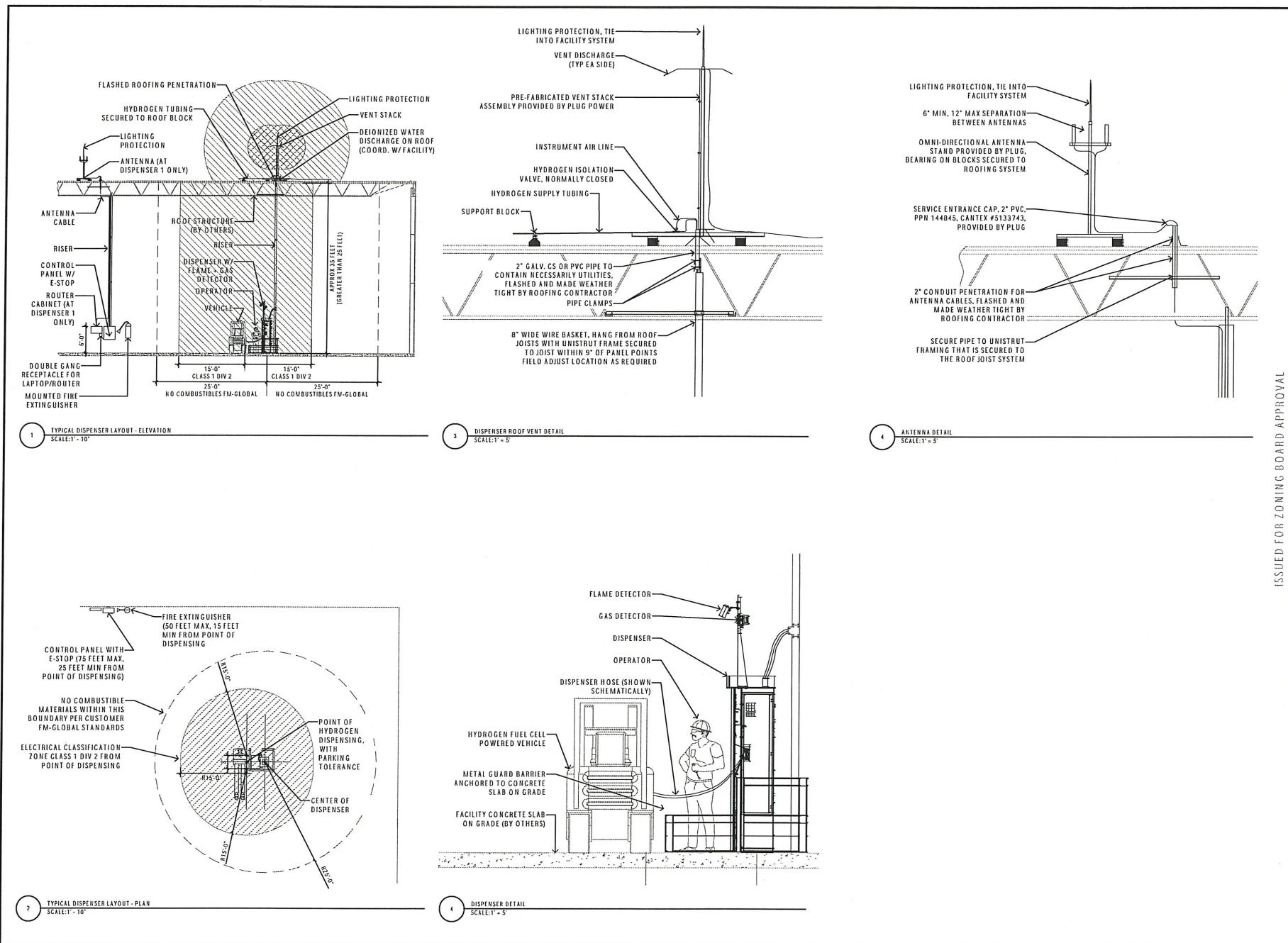
G-151

1 DELIVERY PATHS - HYDROGEN PAD AREA
SCALE: 1" = 30'

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G-152





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Checked By: **JVM**
Drawn By: **MJB**
Hydrogen Provider: 
125 Vista Boulevard
Slingerlands, New York, USA
www.plugpower.com

Project: GenFuel
Hydrogen Storage and Distribution Infrastructure
HL-550D System

Location:
Walmart
Distribution Center
6120 3M Drive
Menomonie, WI 54751

Drawing Name:
Hydrogen System
Typical Details
Near Dispenser

Project No.	2501
Scale	AS SHOWN
Date:	February 14, 2025
Revision:	A
Drawing Number:	

G-510

No.	Date	Description
A	2/14/25	ZONING APPROVAL

Checked by: JVM
Drawn by: MJB
Hydrogen Provider:



125 Vista Boulevard
Slingerlands, New York, USA
www.pluginpower.com

Project: GenFuel
Hydrogen Storage and Distribution Infrastructure

HL-550D System

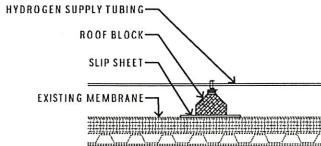
Location: Walmart Distribution Center
6120 3M Drive
Monomoyne, WI 54751

Drawing Name: Hydrogen System Typical Details

Project No: 2501
State: AS SHOWN
Date: February 14, 2025
Revision: A
Drawing Number:

G-511

ISSUED FOR ZONING BOARD APPROVAL



ANCHORING NOTES FOR ROOF BLOCK

1. SUPPORTS SHALL BE LOCATED NO GREATER THAN 8'-0" ON CENTER.
2. PROVIDE SLIP SHEET (12'X12') UNDER EACH SUPPORT BLOCK ADHERED TO THE MAIN ROOFING MEMBRANE SYSTEM UNLESS NOTED OTHERWISE.
3. USE MANUFACTURERS RECOMMENDED ADHESIVE THAT IS COMPATIBLE WITH THE ROOFING MEMBRANE AND THE BLOCK. ALTERNATE METHOD: THE ROOF MEMBRANE CAN BE HEAT WELDED PER MANUFACTURERS APPROVED METHODS IF APPLICABLE.
4. SLIP SHEETS TO BE THE SAME THICKNESS AND TYPE AS EXISTING ROOFING MEMBRANE.
5. TO INSTALL 'TARGET PATCHES' ON MEMBRANES OLDER THAN 6 MONTHS, CLEAN THE AREA WITH MANUFACTURER'S CLEANER, PRIME THE AREA WITH THE MANUFACTURER'S RECOMMENDED PRIMER TO RE-ACTIVATE THE MEMBRANE, APPLY THE ADHESIVE FOR THE AREA UTILIZED.
6. FOR NEW MEMBRANES, PRIMER IS REQUIRED. USE CLEANER IF MEMBRANE IS OLDER THAN 6 MONTHS.
7. OR VISIBLY DIRTY, PROVIDE ADHESIVE PER ITEM #1.1 ABOVE.
8. PROCEDURES TO ADHERE ROOF SUPPORTS AND SLIP SHEETS MUST BE APPROVED BY LICENSED MEMBRANE APPLICATOR OR THE OWNERS WARRANTY MAY BE VOIDED.
9. DETAIL C IS PROVIDED FOR MECHANICAL CONTRACTOR TO USE PLUG POWERS VENT STACK SECURELY TO THE EXISTING SUPPORT BLOCKS TO MEMBRANE ROOF.
10. ALL RUBBER ROOF BLOCKS SHALL BE C-PORT C-SERIES CHANNEL SUPPORT SKU C10, DURA BLOK DB-10, OR AN APPROVED EQUIVALENT.
11. ALL ROOF BLOCKS SHALL BE ATTACHED TO SLIP SHEET WITH ADHESIVE PER ITEM #1.1 ABOVE.
12. ALL OF THE DETAILS AND NOTES ON THIS DRAWINGS ARE SUGGESTED ANCHORING METHODS FOR THE TUBING SUPPORT BLOCKS.
13. THE ROOFING CONTRACTOR SHALL DETERMINE METHOD TO ANCHOR TUBING SUPPORT BLOCKS TO ROOF.
14. METHOD CHOSEN SHALL HAVE THE CAPACITY TO RESIST SLIDING AND UPLIFT PRODUCED BY WIND LOADS BASED ON THE WIND SPEED SHOWN IN THE LOAD SECTION OF THE GENERAL NOTES.

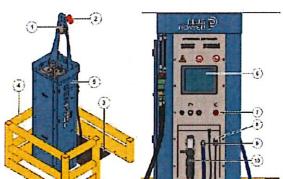


Figure 3.3: The GenFuel Hydrogen Dispenser. (1) Safety Shutoff Valve, (2) Service Valve, (3) Service Cover, (4) Power Connection, (5) Safety Shutoff Valve, (6) Service Valve, (7) Overhead Buttons and Indicator Lights, (8) Overhead Buttons, (9) Valve Handle, (10) Pump Head.

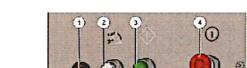
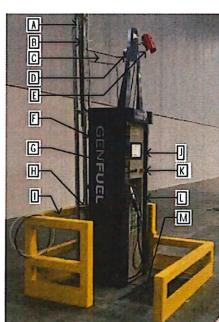


Figure 3.4: The Buttons and Indicator Lights are Standard Features of GenFuel. (1) Audible Alarm, (2) Audible Alarm and Siren, (3) Siren, (4) Emergency Stop, (5) Emergency Stop and Siren, (6) Emergency Stop and Siren, (7) Emergency Stop and Siren.



TYPICAL DISPENSER DETAIL

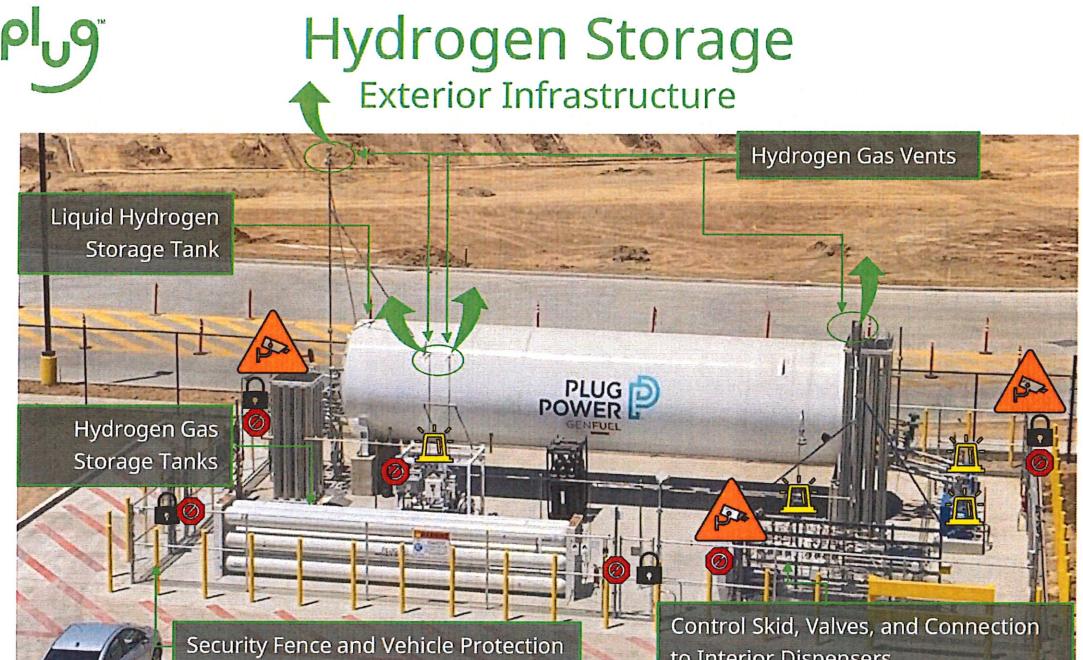
LEGEND

- A. WIRE BASKET SECURED TO UNISTRUT RISER
- B. UTILITIES ELECTRICAL, DATA, AIR, DISCHARGE WATER*
- C. HYDROGEN SUPPLY AND VENT TUBING LINES
- D. HYDROGEN DETECTOR (NFPA 2, 10.3.13)
- E. U料VIRAL FLAME DETECTOR (NFPA 2, 10.3.13)
- F. DISPENSER ENCLOSURE SECURED TO FLOOR
- G. BREAKAWAY DEVICE (NFPA 2, 10.3.7.6)
- H. UNISTRUT RISER SECURED TO BOLLARD FRAME
- I. BOLLARD FRAME BARRIER PROTECTION
- J. DISPLAY
- K. EMERGENCY STOP
- L. DISPENSING NOZZLE
- M. SAFETY PRESSURE MAT

COMMENTS

- HYDROGEN LINE SHALL BE CONTINUOUS BETWEEN HYDROGEN DISPENSER AND RO OF MOUNTED ISOLATION VALVE
- HYDROGEN AND FLAME DETECTOR SHALL BE OPERATING CONTINUOUSLY (NOT ONLY DURING REFUELING EVENTS) THOSE TWO DETECTION DEVICES SHALL BE LISTED (FM, CSA AND UL)
- PROVIDE FIRE EXTINGUISHER PER NFPA 204.7 MINIMUM TYPE 4-A: 80-B:C (MIN) NO MORE THAN 50FT FROM DISPENSING AREA (PROVIDED BY CUSTOMER).





Safety Systems



Limit Access



Hydrogen Gas Vents



Hydrogen Gas Detectors



Flame Detectors



Emergency Stop Buttons

- Access is limited to the area via locked gates, fencing, and placarding.
- Hydrogen Gas periodically vents 15+ feet above ground level and typically disperses upwards.
- Sensors continuously scan for hydrogen leaks and heat sources – instantly closing the system if detected.
- Emergency stop buttons are placed at gates, at select equipment, and at the building.
- The system is fully automated and remotely monitored 24/7.
- Combustible materials are removed from the region.





Walmart Distribution Center #6025
6100 3M Drive
Menomonie, WI 54751

February 6, 2025

To Whom it May Concern:

Please be advised that WALMART INC. ("Walmart") hereby appoints Plug Power, Inc. as representative of Walmart solely to seek a zoning variance on behalf of Walmart with respect to Walmart's property located at 6100 3M Drive, Menomonie, WI 54751.

If you have questions, please contact the undersigned.

Sincerely,

WALMART INC.

By: _____

Name: Marcea Weiss

Title: General Manager

**NOTICE OF PUBLIC HEARING
CITY OF MENOMONIE
BOARD OF ZONING APPEALS**

March 6, 2025

2:00 p.m.

Please take notice that the Board of Zoning Appeals for the City of Menomonie will hold a public hearing on Thursday, March 6, 2025 at 2:00 p.m. at City Hall, 800 Wilson Ave., Menomonie, WI to consider a request for a conditional use permit for a hydrogen fueling system at 6100 3M Drive (Walmart Distribution Center). This property is zoned I-1 Restricted Industrial District.

Persons wishing to appear at the hearing may do so in person or by Attorney. Written statements may be filed with the City of Menomonie Clerk, 800 Wilson Ave, Menomonie WI 54751 until one hour prior to the public hearing.

Dated: February 19, 2025 Signed: Kate Martin
City Clerk

Published: February 19, 2025
February 26, 2025
Colfax Messenger



City of Menomonie
Kate Martin

City Clerk
800 Wilson Avenue
Menomonie, WI 54751
715 232-2221 Ext.1006
kmartin@menomonie-wi.gov

February 19, 2025

<Resident Name>
<Resident Address>

Re: Walmart Distribution Center
6100 3M Drive
Conditional Use Permit for Hydrogen Fueling System

Dear Resident:

I am writing to inform you that Walmart Distribution Center has submitted an application for a conditional use permit for hydrogen fueling system at 6100 3M Drive.

Please find attached a copy of the Public Hearing Notice. You are being notified since you are listed as the owner or tenant of property within 175-feet of the proposed conditional use.

If you have any questions about the proposed conditional use permit please do not hesitate to contact me at your convenience.

If you have concerns regarding the proposed conditional use permit, please submit a written comment or attend and speak at the public hearing.

Sincerely,

Catherine Martin
City Clerk

Walmart Store # 01-1819
P.O. Box 8050
Bentonville, AR 72712

Dunn County Highway Department
ATTN: Dustin Binder, Highway Commissioner
3303 USH 12 East
Menomonie, WI 54751

Dale Quilling
E6006 USH 12 East
Menomonie, WI 54751

Sandra Quilling
E6149 USH 12 East
Menomonie, WI 54751

Dale Quilling and Sandra Quilling
E6146 610th Avenue
Menomonie, WI 54751

LVN, LLC
5408 3M Drive
Suite B
Menomonie, WI 54751

REB, Inc.
5408 3M Drive
Suite A
Menomonie, WI 54751

Stainless Technologies
5408 3M Drive
Suite B
Menomonie, WI 54751

Midwest Stainless
5408 3M Drive
Suite B
Menomonie, WI 54751

Chippewa Valley Warehouse
P.O. Box 202
Eau Claire, WI 54702

Chippewa Valley Warehouse
5613 3M Drive
Menomonie, WI 54751

PSG Properties, LLC
5815 3M Drive
Menomonie, WI 54751

MP-Menomonie, LLC
5100 Eastpark Blvd.
Suite 210
Madison, WI 53718

Wisconsin Kenworth - Menomonie
5913 3M Drive
Menomonie, WI 54751

Kwik Trip, Inc.
1626 Oak Street
La Crosse, WI 54603

Kwik Trip, Inc.
6013 3M Drive
Menomonie, WI 54751

Kwik Trip, Inc.
6017 3M Drive
Menomonie, WI 54751

Kwik Trip, Inc.
1702 Plaza Drive
Menomonie, WI 54751

City of Menomonie
800 Wilson Avenue
Menomonie, WI 54751



City of Menomonie

800 Wilson Avenue
Menomonie, Wisconsin 54751-2795

BOARD OF ZONING APPEALS

DRAFT

BE IT RESOLVED by the Board of Zoning Appeals of the City of Menomonie:

WHEREAS a hearing was duly held before this Board on March 6, 2025 upon the petition of Walmart Distribution Center, 6100 3M Drive, for a conditional use permit for a hydrogen fueling system.

It appears that property owners and tenants within 175 feet of said premises were duly notified of said hearing.

FINDINGS OF FACT:

1. The proposed use is a conditionally permitted use.
2. A hydrogen fueling system at this location will not affect the public health, safety and general welfare provided that the conditions set forth below are followed.

The Board having given the matter due consideration and having been fully advised,

BE IT THEREFORE RESOLVED that the petition be granted with the following conditions:

1. The emergency access road from the driveway from 3M Drive to the employee parking lot shall remain accessible to emergency vehicles.
2. A gate shall be provided in the northwest corner of the proposed perimeter fence around the permanent hydrogen storage pad.

Adopted: _____, 2025

City Clerk, Catherine Martin



City of Menomonie
David Schofield

Director of Public Works
800 Wilson Avenue
Menomonie, WI 54751
715 232-2221 Ext.1020
dschofield@menomonie-wi.gov

TO: Board of Appeals
FROM: David Schofield, Director of Public Works
SUBJECT: Board of Appeals Bylaws
DATE: March 6, 2025 Board of Appeals Meeting

The Board of Appeals has operated under a set of Bylaws. The Bylaws date to 1974 and appear to have been most recently revised in 2022.

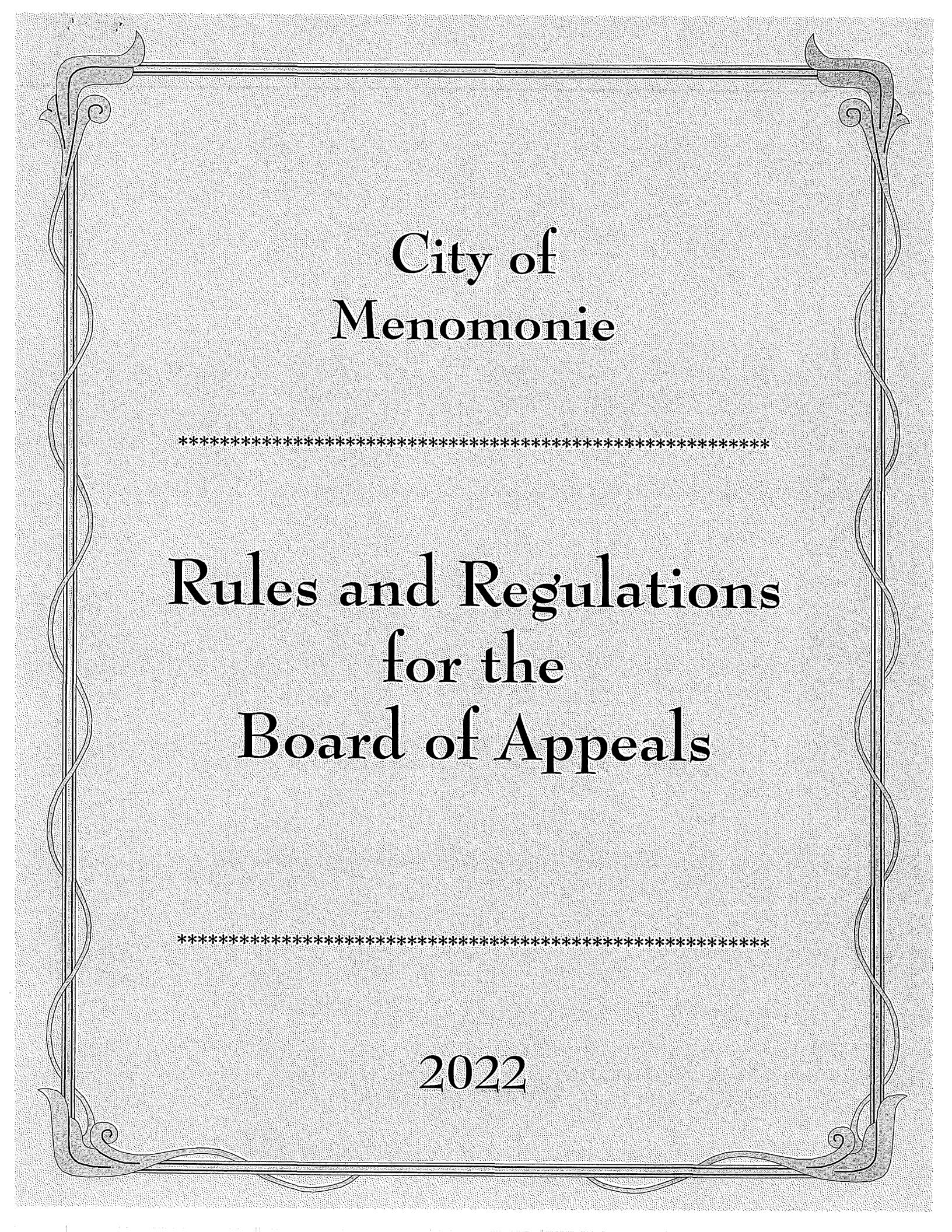
I note that the Bylaws are not entirely consistent with City Code and Wisconsin Statutes. For example, the Bylaws require publication of a public hearing notice as a Class 1 Notice (see Bylaws, Article V, Paragraph 5) whereas Wisconsin Statute 62.23(7)(de)3 requires a Class 2 Notice.

I note that the Bylaws contain provisions that are impractical. For example, the Bylaws require notice of public hearing be mailed to "all owners and residents within a distance of 175' of the property concerned" (emphasis added) whereas City Code requires mailing to "all owners of record". The City does not maintain a database of all rental tenants.

City Staff propose to merge the bylaws into City Code Title 10, Chapter 2 and amend it to comply with Wisconsin Statutes but wanted input from the Board of Appeals prior to proceeding.

Attachments:

- Bylaws
- City Code Title 10, Chapter 2



City of Menomonie

Rules and Regulations for the Board of Appeals

2022

**RULES AND REGULATIONS FOR THE
MENOMONIE BOARD OF APPEALS**

ARTICLE I - ORGANIZATION AND OFFICERS

1. The Board shall organize annually during the first week of May and elect a Chairman and a Vice-Chairman.
2. The Chairman shall preside at all meetings of the Board. In the absence of the Chairman, the Vice-Chairman shall preside.
3. Subject to these rules, the Chairman shall decide all points of order and procedure, unless overruled by a majority of the Board in session at that time.
4. The officer presiding at the meeting and the Secretary shall sign the resolutions, minutes, and other official documents adopted or approved by the Board.
5. Subject to these rules and the direction of the Board, the Secretary shall submit reports on all official matters occurring between meetings; conduct all official correspondence, send out all notices required by these rules and orders of the Board; make the necessary inspections of premises; attend all meeting and hearings; keep the minutes of the Board's proceedings; draft the necessary resolutions; compile the required records, maintain the necessary files and generally supervise all the clerical and technical work of the Board.

ARTICLE II - MEETINGS

1. Meetings may be called by the Chairman or by two or more members, provided that notice of the same is mailed to each member at least three days before the time set.
2. All hearing sessions shall be open to the public.
3. Three members of the Board shall constitute a quorum.
4. A majority vote of the members present shall be necessary to reverse any order, requirement, decision or determination appealed from or decide in favor of the applicant on any matter on which it is required to pass or to affect any variation in the requirements of this chapter.
5. The first Thursday of each month shall be the established meeting date.

ARTICLE III - CASES BEFORE THE BOARD

1. The procedure of appeal.
 - A. A written appeal shall be filed with the Secretary of the Board from any order, requirement, decision, or determination by the Building Inspector in the enforcement of the Zoning Ordinance. The Board's action on these appeals should usually be governed by the existence of one or more of the following conditions:

- (1) That the exception or variance desired arises from some condition which is not uniform in similar districts.
- (2) That the granting of the permit for the variance will not prejudice the rights of the adjacent property owners or residents.
- (3) That the strict application of the terms of this ordinance will constitute unnecessary hardship upon the property owners represented in the appeal.
- (4) That the exception or variance desired is not against the public interest.

B. Notice shall be given prior to the hearing to all owners and tenants within a distance of 175' of the property concerned of the time, place, and character of the proposed hearing.

C. The appeal shall be in writing on forms provided by the Secretary of the Board, which can be obtained in the office of the City Clerk, City Hall.

- (1) This appeal shall be filed within thirty (30) days after a ruling has been made by the Building Inspector. This appeal shall be heard at the next regularly scheduled meeting, unless otherwise required.
- (2) One copy of the appeal shall be filed with the Building Inspector.
- (3) When the appeal is filed, the Building Inspector shall forthwith transmit all of his records regarding the matter to the Board, and the Building Inspector shall be present at all hearings.

D. The appellant must attach to the appeal form an explicit typewritten statement setting forth:

- (1) The principal points on which the appeal is made.
- (2) A clear and accurate description of the proposed work and use.
- (3) Specific reference to that section of the Zoning Ordinance under which it is claimed the permit should be issued.
- (4) Names and addresses of all owners and tenants of property within a distance of 175' of the property concerned, accompanied by reasonable proof that this information is correct.
- (5) Appeals may be taken as stated herein upon payment to the City Treasurer of the following applicable fee:

Variance (single family/owner occupied)	\$100.00
Variance (all others)	\$200.00
Variance/Conditional Use (when both required)	\$250.00
Special Hearings (Plus applicable above fee)	\$50.00

2. No appeal shall be considered, where an appeal case has been previously decided, involving the same premises and zoning ordinance requirements, except in cases where new plans or new facts pertaining to said requirements or regulations are presented, showing changed conditions or circumstances which in the opinion of the Board materially alter the aspects of the case.
3. The procedure of appeal of conditionally permitted uses.
 - A. A written request for approval of the use shall be filed with the Secretary of the Board. The Board's action on these requests shall be governed by evidence therein establishing the desirability or undesirability of the proposed use in accordance with Section XII, A, 2 of the Zoning Ordinance.
 - B. Notice shall be given prior to the hearing to all owners and tenants within a distance of 175' of the property concerned of the time, place, and character of the proposed hearing.
 - C. The request must be accompanied by the following:
 - (1) A plot plan showing the legal description and, in accurate scale, the dimensions of the property and all existing and proposed improvements to the property.
 - (2) Names and addresses of all owners and tenants of property within a distance of 175' of the property concerned.
 - (3) Requests may be taken as stated herein upon payment to the City Treasurer of the following applicable fee:

Conditional Use	\$250.00
Variance/Conditional Use (when both required)	\$250.00
Special Hearings (Plus applicable above fee)	\$50.00

ARTICLE IV - CALENDAR

1. The Secretary shall maintain a docket for all cases, numbering the cases on the docket consecutively.
2. Cases shall be heard at the next regularly scheduled meeting date, unless otherwise requested.
3. Cases shall be assigned for hearing in the order in which they appear on the calendar, except that the hearing of any case may be advanced or postponed by order of the Board upon good cause being shown.

ARTICLE V - NOTICE OF HEARING

1. Notice to the appellant shall be given not less than ten (10) days prior to the date of hearing and shall be by certified letter to his last known address.
2. Notice to all owners and residents within a distance of 175' of the property concerned shall be given not less than ten (10) days prior to the date of the hearing.
3. All notices by mail shall be directed to the addresses stated in the petition.
4. The Secretary shall furnish the newspapers with a brief notice of the cases on the calendar of the Board for publication as a news item prior to the public hearing.
5. The Secretary shall cause publication of hearing in the legal newspaper in one issue, the same to be made at least six (6) days prior to the date of hearing.
6. The Secretary shall forthwith, upon the making and filing of the Board's order or decision, mail a copy thereof to appellant(s) and to any parties aggrieved by said order or decision who appeared at said hearing or whose names were upon any written protest or communication pertaining to the case. Notice to the appellant(s) shall be by certified mail.

ARTICLE VI - HEARING OF CASES

1. All hearings of the Board and all official actions taken by the Board shall be public.
2. The appellant shall be present at the public hearing either in person or by counsel or agent. The appellant, and persons appearing in his behalf, shall be heard first and thereafter the individuals appearing in opposition to the appeal. In the event of the absence of the appellant, the Board may at its discretion hear from the persons appearing in opposition, and may have the transcript of their statements presented for consideration in arriving at a decision, or, at the discretion of the Board, a subsequent meeting may be held to review these statements.
3. All testimony shall be under oath.
4. The Board may summon witnesses.

ARTICLE VII - FINAL DISPOSITION OF CASES

1. The final disposition of every case shall be in the form of a resolution containing all pertinent findings.
2. In exercising its powers, the Board by its resolution may:
 - A. Reverse or affirm wholly or partly; or
 - B. Modify the order, requirement, decision, or determination appealed from; or

- C. Grant such variance or approval in accordance with the evidence and law as it deems proper.
- D. All orders granting a variance or conditionally permitted use shall contain a condition that the variance or conditionally permitted use shall lapse in the event that the construction or the conditionally permitted use does not commence within twelve (12) months of the date of the granting of the variance or the conditionally permitted use.
 - 1. **EXTENSION REQUEST - PRIOR TO THE END OF THE TWELVE MONTHS APPROVED TIME PERIOD:**
 - a. Applicant may submit a request in writing for an extension.
 - b. The Board may consider the request and either grant or deny the request for an extension under "Any Other Business" on the current agenda (***does not have to be a separate agenda item***).
 - c. \$50.00 fee must be paid at the time of submitting the written request (Same as the "Special Hearing" fee.)
 - 2. **EXTENSION REQUEST - BEYOND THE TWELVE MONTHS APPROVED TIME PERIOD:**
 - a. Applicant must re-file all paperwork, even if it is the exact same information as the original hearing.
 - b. Applicants privilege to re-file the original paperwork expires **two years** after the date of the original granting of the variance or conditional use approval.
 - c. Full application fee is required, as in the instance of the original case.
 - 3. Every variance or approval granted or denied by the Board shall be accompanied by written findings of fact and reasons for granting or denying the variance or approval, and various conditions may be stipulated by the Board to be fulfilled before granting of a variance or approval.
 - 4. In the event of failure to reach a decision in any case, the matter shall be presented at the next meeting.
 - 5. An appellant may withdraw his case at any time prior to the adoption of the resolution which would dispose of his case.
 - 6. The Secretary shall transmit to the appellant a copy of the resolution of the final action of the Board within ten (10) days after a decision has been reached by the Board.

7. In the event that the appellant fails to perfect his case, the Board may at any time thirty (30) days or more after the filing of the case, by the vote of the majority of its members, dismiss the case for want of prosecution.
8. Vote shall be by roll call.

ARTICLE VIII - REHEARINGS

1. Requests for rehearing shall be in writing and duly verified. They shall recite the reasons for the request. No request for rehearing will be entertained unless new evidence is submitted which could not reasonably have been presented at the previous hearing. If the request is granted, the same procedure will be followed, in all particulars, as in the instance of an original case.
2. The allowance of a request for rehearing shall require a majority vote of the members present.
3. When a rehearing is permitted, the Board may, in its resolution, stipulate the conditions to which the rehearing shall be subject.

ARTICLE IX - AMENDMENTS

1. Amendments to these rules may be introduced at any meeting of the Board and voted on at any subsequent regular meeting provided that notice of the consideration of any such amendment or passage is mailed to each member prior to the regular meeting.

ARTICLE X - RECORDS

1. The records of appeal cases shall be kept on file in the office of the City Clerk in such manner as to be available for public inspection at all reasonable times.

ARTICLE XI - ORDER OF BUSINESS AT REGULAR MEETINGS

1. The order of business at regular meetings of the Board shall be as follows:
 - A. Roll Call
 - B. Approval of minutes, if any, of previous meetings and action thereon
 - C. Hearing of cases
 - D. Resolutions for Adoption
 - E. Miscellaneous matters
 - F. Adjournment

Revised:	10/01/74	02/21/94	10/06/05
	03/25/82	07/06/95	08/03/06
	04/21/83	08/05/02	10/05/06
	10/24/85	07/01/04	10/16/06

CHAPTER 2

BOARD OF APPEALS

SECTION:

10-2-1: Board Established; Membership; Rules

10-2-2: Powers And Duties

10-2-1: BOARD ESTABLISHED; MEMBERSHIP; RULES:

A. Appointment; Terms:

1. The board of appeals shall consist of five (5) members appointed by the mayor, subject to common council confirmation by simple majority vote, for three (3) year terms. The board of appeals shall designate one of the members chairman. The mayor shall appoint an alternate member, subject to confirmation by the common council by simple majority vote, for a term of three (3) years, who shall act with full power only when a member of the board of appeals is absent or refuses to vote because of interest. Vacancies shall be filled for the unexpired terms of members whose terms become vacant.

2. The city clerk shall be the secretary to the board of appeals.

B. Rules; Meetings: The board of appeals shall adopt rules for its government and procedure. Meetings of the board of appeals shall be held at the call of the chairman and at such other times as the board of appeals may determine. The chairman, or in his absence the acting chairman, may administer oaths and compel the attendance of witnesses. All meetings shall be open to the public.

C. Minutes Of Meetings; Records: The board of appeals shall keep minutes of its proceedings, showing the vote of each member upon each question, or, if absent or failing to vote, indicating such fact, and shall keep records of its examinations and other official actions, all of which shall be immediately filed in the office of the board of appeals and shall be a public record.

D. Appeals; Procedure: Appeals to the board of appeals may be taken by any person aggrieved or by any officer, department, board or bureau of the city affected by any decision of the building inspector. Such appeal shall be taken within a reasonable time, as provided by the rules of the board of appeals, by filing with the building inspector and with the board of appeals a notice of appeal specifying the grounds thereof. The building inspector shall forthwith transmit to the board of appeals all the papers constituting the record upon which the action appealed from was taken. The board of appeals shall fix a reasonable time for the hearing of appeals and give public notice thereof as well as due notice to the parties in interest, and shall decide the same within a reasonable time.

E. Filing Application For Hearing; Fee: The board of appeals shall establish a fee to be charged with the filing of all applications for hearings which shall be sufficient to cover all costs directly associated with said hearings exclusive of personnel costs. (1975 Code Ch. 18 § XV)

10-2-2: POWERS AND DUTIES:

The board of appeals shall have the following powers:

A. To hear and decide appeals where it is alleged there is error in any order, requirement, decision or determination made by the building inspector.

B. To authorize, upon appeal in specific cases, such variance from the terms of this title as will not be contrary to the public interest, where owing to special conditions peculiar to a specific property, a literal enforcement will result in practical difficulty or unnecessary hardship, so that the spirit of this title

shall be observed, public safety and welfare secured and substantial justice done; provided, however, that in exercising this authority the board shall be subject to the following rules and limitations:

1. Except as specifically provided, no action of the board of appeals shall have the effect of permitting in any district uses prohibited in such district.
2. In every case where a variance from these regulations has been granted by the board of appeals, the minutes of the board shall affirmatively show in what particular and specific respects an "unnecessary hardship" or "practical difficulty" would have been created by the literal enforcement of the terms of this title.

C. To hear and decide exceptions to the terms of this title, as follows (see section 10-1-4 of this title, definition of "exception"):

1. To grant permits for certain specified uses, under certain circumstances, in districts from which such uses are otherwise excluded by this title. See subsection 10-4-2K of this title.
2. To approve the location of specified uses in the general commercial district, as provided in chapter 11 of this title.
3. To approve the location of specified uses in the general industrial district, as provided in chapter 16 of this title.
4. To grant a permit for the extension of a district boundary for a distance of not more than thirty feet (30') only where the boundary of a district divides a lot in a single ownership at the time of the adoption of this title.
5. To permit in the single-family residential district, in appropriate cases and subject to appropriate conditions and safeguards, the alteration or conversion into a two-family dwelling of a building which was in use as a residence on the effective date of this title, and which has, prior to such conversion, a floor area in excess of one thousand two hundred (1,200) square feet; provided, however, as follows:
 - a. The enclosed usable area of the building shall not be increased nor shall the height of the building be increased.
 - b. Living quarters shall not be provided except in those portions of the building devoted to or designed for living quarters at the time of the adoption of this title; provided further, that the minimum floor area per family shall be not less than eight hundred (800) square feet.
 - c. The open spaces surrounding the building shall be at least equivalent to those required by this title for a new building.
6. To permit the location of private commercial or industrial parking lots in the multiple-family residence district, subject to the following conditions:
 - a. Each such parking lot shall abut a boundary of a commercial or industrial district or be separated therefrom by a street, alley or railroad right of way.
 - b. No such parking lot shall be so laid out as to create a residential island within a block; and to aid in accomplishing the purposes of this regulation, it is hereby provided that no such parking lot shall abut on more than two (2) lot lines of any lot used for residential purposes.
 - c. Each such parking lot shall contain at least ten (10) parking spaces.
 - d. Such parking lots shall comply with the regulations of section 10-4-7 of this title.
 - e. Such parking lots shall be restricted to the parking of passenger automobiles. (1975 Code Ch. 18 § XV)

7. The board of appeals shall have authority to act on any application for the location of a temporary mobile home outside of a licensed mobile home park for such period of time as it shall fix and determine in accordance with facts and circumstances in each case, all upon the condition, however, that all of the sanitary requirements of the state department of safety and professional services are met and maintained and that all of the requirements of section 66.0435, Wisconsin statutes, and all amendments thereto, are complied with. (Ord. 2013-07, 4-1-2013)

8. To interpret the provisions of this title in such a way as to carry out the intent and purpose of the plan as shown on the district map accompanying and made a part of this title, where the street layout actually on the ground varies from the street layout on the aforesaid map. (1975 Code Ch. 18 § XV)

D. The board of appeals may reverse or affirm wholly or in part or may modify any order, requirement, decision or determination appealed from and shall make such order, requirement, decision or determination as in its opinion ought to be made in the premises and to that end shall have all the powers of the building inspector. Three (3) members of the board shall constitute a quorum. A majority vote of the members present shall be necessary to reverse any order, requirement, decision or determination appealed from, or to decide in favor of the applicant on any matter on which it is required to pass, or to effect any variation in the requirements of this title. In all cases, refusal of the board to act favorably to the applicant on any matter shall be stated in writing, together with the reasons for such refusal. One copy thereof shall be delivered to the applicant and another shall be placed in the records of the board and shall be a public record. (Ord. 2005-13, 10-17-2005)

E. The board of appeals shall have the power to call on any other city department for assistance in the performance of its duties, and it shall be the duty of such other departments to render such assistance as may be reasonably required.

F. In exercising the foregoing powers the board of appeals may in appropriate cases establish suitable conditions and safeguards in harmony with the general purpose and intent of this title. (1975 Code Ch. 18 § XV)